

PRETRIAL ORDER EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

EXHIBIT 1:

Parties' Joint Statement of Uncontested Facts

The following facts are not disputed and/or have been stipulated to by the Parties, and thus require no proof at trial. Any party, with prior notice to all other parties, may read any or all of these uncontested facts to the jury or Court, and will be charged for the time used to do so.

I. The Parties

1. Plaintiff f'real foods, LLC ("f'real") is a limited liability company organized under the laws of California, with its principal place of business in Emeryville, California.

2. f'real was founded by James J. Farrell.

3. Plaintiff Rich Products Corporation ("Rich") is a corporation organized under the laws of Delaware, with its principal place of business in Buffalo, New York.

4. f'real is now a wholly owned subsidiary of Rich.

5. Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach") is a corporation organized under the laws of Delaware, with its principal place of business in Glen Allen, Virginia.

6. Defendant Hershey Creamery Company ("Hershey Creamery") is a corporation organized under the laws of Delaware, with its principal place of business in Harrisburg, Pennsylvania.

7. Hershey Creamery is not affiliated with Hershey Company, the well-known multinational chocolate company.

II. The Patents-in-Suit

8. U.S. Patent No. 5,803,377 (the “’377 patent”), titled “Apparatus and Method for Making Frozen Drinks,” was issued by the United States Patent and Trademark Office on September 8, 1998.

9. The ’377 patent names James J. Farrell as the inventor.

10. The ’377 patent issued from U.S. Patent Appl. No. 794,859 (filed February 5, 1997), and claims priority to an application filed May 17, 1996.

11. f’real is the owner by assignment of the entire right, title, and interest in and to the ’377 patent.

12. U.S. Patent No. 7,144,150 (the “’150 patent”), titled “Rinseable Splash Shield and Method of Use,” was issued by the United States Patent and Trademark Office on December 5, 2006.

13. The ’150 patent names James J. Farrell as the inventor.

14. The ’150 patent issued from U.S. Patent Appl. No. 10/715,171 (filed November 17, 2003).

15. f’real is the named assignee of the ’150 patent listed in the assignment records of the U.S. Patent and Trademark Office.

16. U.S. Patent No. 7,520,658 (the “’658 patent”), titled “Rinseable Splash Shield and Method of Use,” was issued by the United States Patent and Trademark Office on April 21, 2009.

17. The ’658 patent issued from U.S. Patent Appl. No. 11/284,646 (filed November 22, 2005). The application that issued as the ’658 patent is a divisional of the application that issued as the ’150 patent.

18. The ’658 patent names James J. Farrell as the inventor.

19. f’real is the named assignee of the ’658 patent listed in the assignment records of the U.S. Patent and Trademark Office.

20. U.S. Patent No. 7,520,662 (the “’662 patent”), titled “Rinseable Splash Shield and Method of Use,” was issued by the United States Patent and Trademark Office on April 21, 2009.

21. The ’662 patent issued from U.S. Patent Appl. No. 11/116,497 (filed April 28, 2005). The application that issued as the ’662 patent is a continuation-in-part of the application that issued as the ’150 patent.

22. The ’662 patent names James J. Farrell as the inventor.

23. f’real is the named assignee of the ’662 patent listed in the assignment records of the U.S. Patent and Trademark Office.

24. The '150, '658, and '662 patents all claim the benefit of U.S. Provisional Application No. 60/426,622, filed November 15, 2002, and titled "Rinseable Splash Shield."

III. The Accused Products

25. Hamilton Beach sells, or has sold, the accused MIC2000, BIC2000, and BIC3000-DQ devices in the United States.

26. Hamilton Beach sells, or has sold, the accused IMI2000 blending module in the United States.

27. Hershey Creamery has purchased the accused MIC2000 blenders for use in its Shake Shop Express retail program.

IV. Asserted Prior Art

28. U.S. Patent No. 1,592,788 to Supervielle is entitled "Sanitary Drink Mixer," issued on January 15, 1926.

29. U.S. Patent No. 2,995,118 to Oberg is entitled "Coin-operated Milk Shake Machine," issued on August 8, 1961.

30. U.S. Patent No. 3,147,958 to Stiffler is entitled "Ice Cream-Milk Mixer," and issued September 8, 1964.

31. U.S. Patent No. 3,295,997 to Tomlinson *et al.* is entitled "Milk Shake Machine," and issued January 3, 1967.

32. U.S. Patent No. 4,637,221 to Levine is entitled “Mixing Apparatus and Method,” and issued January 20, 1987.

33. U.S. Patent No. 4,740,088 to Kelly is entitled “Safety and Sanitary System Improvements for Frozen Confections Blending Machines,” and issued April 26, 1988.

34. U.S. Patent No. 4,822,175 to Barnard *et al.* is entitled “Splash Guard for a Food Mixer,” and issued on April 18, 1989.

35. U.S. Patent No. 5,071,077 to Arroubi *et al.* is entitled “Electric Kitchen Appliance with Multiple Functions for Treating Foodstuffs,” and issued on December 10, 1991.

36. U.S. Patent No. 5,439,289 to Nielson is entitled “Apparatus for Mixing Ingredients in a Receptacle,” and issued on August 8, 1995.

37. U.S. Patent No. 5,599,103 to Linscott is entitled “Milkshake Mixer Blade,” and issued February 4, 1997.

38. U.S. Patent No. 6,164,575 to Karkos is entitled “Self-Seating Cover Assembly for a Removable Food Receptacle,” and issued on December 26, 2000.

39. U.S. Patent Application Publication No. US 2002/0048626A1 to Miller *et al.* is entitled “Slurried Confection Preparation and Flavor-Injected Blending System and Method,” and published on April 25, 2002.

PRETRIAL ORDER EXHIBIT 2

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

EXHIBIT 2:

Plaintiffs' Statement of Contested Facts to be Litigated at Trial

Plaintiffs respectfully submit this Statement of Contested Facts, which is based on Plaintiffs' claims and Plaintiffs' current understanding of the defenses and counterclaims of Defendants Hamilton Beach and Hershey Creamery and the proceedings in this action to date.

To the extent Plaintiffs' Statement of Issues of Law That Remain to be Litigated set forth in **Exhibit 4** contains issues of fact, those issues are incorporated herein by reference. Likewise, should the Court determine that any issue identified below is more appropriately considered an issue of law, Plaintiffs incorporate such issues by reference into **Exhibit 4**. By including a fact herein, Plaintiffs do not assume the burden of proof or production with regard to that fact. Plaintiffs reserve the right to revise this statement in light of the Court's rulings, in response to Defendants' positions, or as otherwise may be appropriate. The following statements are not exhaustive, and Plaintiffs reserve the right to prove any matters identified in their pleadings, infringement contentions, interrogatory responses, and/or expert reports. Plaintiffs also intend to offer evidence as to the issues of fact and issues of law identified in this pretrial order. Plaintiffs further intend to offer evidence to rebut evidence offered by Defendants, and to argue that Defendants are precluded from offering evidence in support of theories and claims not adequately disclosed in accordance with the scheduling order. Plaintiffs

incorporate by reference their expert reports in support of any proof to be presented by expert testimony.

I. Issues on Which Plaintiffs Bear the Burden of Proof

A. Infringement

1. Infringement of U.S. Patent No. 5,803,377 (the “377 patent”)

1. Whether Defendants Hamilton Beach or Hershey Creamery directly infringed, literally or under the doctrine of equivalents, claims 1, 11, 18, 19, and 27 of the ’377 patent under 35 U.S.C. § 271(a) by making, using, selling, offering to sell, or importing into the United States the accused MIC2000 blender.

2. Infringement of U.S. Patent No. 7,144,150 (the “150 patent”)

2. Whether Defendant Hamilton Beach directly infringed, and continues to infringe, literally or under the doctrine of equivalents, claims 15, 20, and 22 of the ’150 patent under 35 U.S.C. § 271(a) by making, using, selling, offering to sell, or importing into the United States the accused MIC2000, BIC2000, and BIC3000-DQ blenders.

3. Whether Defendant Hershey Creamery directly infringed, and continues to infringe, literally or under the doctrine of equivalents, claims 15, 20, and 22 of the ’150 patent under 35 U.S.C. § 271(c) by making, using, selling, or offering to sell the accused MIC2000 blenders.

3. Infringement of U.S. Patent No. 7,520,658 (the “’658 patent”)

4. Whether Defendant Hamilton Beach directly infringed, and continues to infringe, literally or under the doctrine of equivalents, claims 1, 5, 6, 8, 9, 10 and 11 of the ’658 patent under 35 U.S.C. § 271(a) by making, using, selling, offering to sell, or importing into the United States the accused MIC2000, IMI2000, BIC2000, and BIC3000-DQ blenders.

5. Whether Defendant Hershey Creamery directly infringed, and continues to infringe, literally or under the doctrine of equivalents, claims 1, 5, 6, 8, 9, 10 and 11 of the ’658 patent under 35 U.S.C. § 271(a) by making, using, selling, or offering to sell the accused MIC2000 blenders.

6. Whether Defendants Hamilton Beach or Hershey Creamery have infringed one or more of the asserted claims of the ’658 patent under 35 U.S.C. § 271(b) by inducing acts by others that constituted infringement of the asserted claims of the ’658 patent, with knowledge of the ’658 patent.

7. Whether Defendants Hamilton Beach or Hershey Creamery have contributed, under 35 U.S.C. § 271(c), to infringement by others of one or more of the asserted claims of the ’658 patent, with knowledge of the ’658 patent.

4. Infringement of U.S. Patent No. 7,520,662 (the “’662 patent”)

8. Whether Defendant Hamilton Beach has directly infringed, and continues to infringe, claim 21 of the ’662 patent under 35 U.S.C. § 271(a) by making, using, selling, offering to sell, or importing into the United States the accused MIC2000, IMI2000, BIC2000, and BIC3000-DQ blenders.

9. Whether Defendant Hershey Creamery directly infringed, and continues to infringe, claim 21 of the ’662 patent under 35 U.S.C. § 271(a) by making, using, selling, or offering to sell the accused MIC2000 blenders.

10. Whether Defendants Hamilton Beach or Hershey Creamery have infringed one or more of the asserted claims of the ’662 patent under 35 U.S.C. § 271(b) by inducing acts by others that constituted infringement of the asserted claims of the ’662 patent, with knowledge of the ’662 patent.

11. Whether Defendants Hamilton Beach or Hershey Creamery have contributed, under 35 U.S.C. § 271(c), to infringement by others of one or more of the asserted claims of the ’662 patent, with knowledge of the ’662 patent.

B. Damages to Plaintiffs (in the event liability is found)

12. The amount of compensatory damages Plaintiffs are entitled to for Defendants’ infringement of the ’377, ’150, ’658, and ’662 patents. Plaintiffs intend to prove that the compensatory damages owed by Defendants include both lost profits and, where lost profit damages are not available, a reasonable royalty.

13. For lost profits, whether, during the damages period: (1) there was a demand for the patented products; (2) there were no acceptable non-infringing alternatives; (3) f'real had the manufacturing and marketing capacity to make the infringing sales Defendants made; (4) f'real would have made a quantifiable amount of lost profits if Defendants had not infringed.

14. For any infringement for which Plaintiffs are not entitled to lost profits, the amount of reasonable royalty damages Plaintiffs are entitled to for Defendants' infringement.

15. Whether Plaintiffs are entitled to an accounting of damages for post-verdict infringement and the amount of such damages.

16. Whether Plaintiffs are entitled to an award of prejudgment and postjudgment interest, and the amount of such interest.

C. Injunctive Relief to Plaintiffs (in the event liability is found)

17. Whether Plaintiffs are entitled to injunctive relief that permanently enjoins Defendants and their officers, employees, agents, attorneys, affiliates, successors, assigns, and others acting in privity or concert with them from further infringement of the '150, '658, and '662 patents.

18. Whether, as part of the injunctive relief, Plaintiffs are entitled to an order that requires the recall, removal, seizure, or destruction of all infringing products currently in the marketplace.

D. Enhanced Damages, Attorneys' Fees and Costs

19. Whether Plaintiffs are entitled to enhanced damages pursuant to 35 U.S.C. § 284.

20. Whether this is an exceptional case pursuant to 35 U.S.C. § 285.

21. Whether Plaintiffs are entitled to attorneys' fees, expenses, or costs, and the amount.

22. Whether Plaintiffs are entitled to any further relief that the Court deems just and proper.

II. Issues on Which Defendants Bear the Burden of Proof

A. Invalidity

23. The scope and content of the asserted prior art, and differences between the claimed inventions of the '377, '150, '658, and '662 patents and the asserted prior art.

24. The level of ordinary skill in the art at the time of the invention.

25. Whether Defendants can prove, by clear and convincing evidence, that each asserted prior art reference qualifies under 35 U.S.C. § 102 as prior art to the patent against which it is asserted.

26. Whether Defendants can prove, by clear and convincing evidence, that any claim of the '150, '658, and '662 patents is invalid under 35 U.S.C. § 102(b), because the claimed invention was offered for sale more than one year before the earliest effective filing date of those patents.

27. Whether Defendants can prove, by clear and convincing evidence, that any of the '150, '658, and '662 patents fails to name all of the actual inventors of one or more claims of any of those patents.

28. Whether Defendants can prove, by clear and convincing evidence, that any asserted claim of the '377, '150, '658, and '662 patents is invalid under 35 U.S.C. § 103 as being obvious in view of Defendants' asserted prior art combinations as set forth in Defendants' pretrial disclosures.

29. Whether Defendants can prove, by clear and convincing evidence, that any asserted claim of the '150 or '658 patent is invalid as anticipated under 35 U.S.C. § 102.

30. Whether Defendants can prove that a person of ordinary skill in the art would modify the prior art asserted by Defendants to arrive at the inventions of the asserted claim against which such prior art is asserted.

31. Whether Defendants can prove that a person of ordinary skill in the art would have had a reasonable expectation of success in modifying or combining the prior art asserted by Defendants to arrive at the invention of the asserted claim against which such prior art is asserted.

32. Whether secondary considerations of non-obviousness of the '377, '150, '658, or '662 patents tend to show that any asserted claim is non-obvious, and whether Defendants can rebut objective indicia of non-obviousness.

33. Whether Defendants can prove, by clear and convincing evidence, that any of the asserted claims is invalid for indefiniteness under 35 U.S.C. § 112.

34. Whether Defendants are entitled to a declaratory judgment of invalidity of the '377, '150, '658, or '662 patents.

PRETRIAL ORDER EXHIBIT 3

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH
PRODUCTS CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41-CFC
CONSOLIDATED

Exhibit 3

Defendants' Statement of Contested Facts

Hamilton Beach Brands, Inc. ("Hamilton Beach") and Hershey Creamery Company ("Hershey") (collectively, "Defendants") provide the following statement of contested facts that remain to be litigated at trial. This statement is based on the parties' pleadings, documentary and testimony evidence, and Defendants' current understanding of Plaintiffs' claims and defenses and the Court's rulings to date. Pursuant to Fed. R. Civ. P. 26(a)(3) and agreement of the parties, Defendants submit the below statement of contested facts. Defendants reserve the right to revise, amend, supplement, or modify its statement of contested facts based upon any pretrial rulings by the Court and/or to address any additional issues, arguments, evidence or

other developments in the case, including edits to the draft pretrial order, any meet and confers or other negotiations between the parties, pending and anticipated motions, and similar developments. Defendants further reserve the right to supplement this statement to rebut or otherwise address the contested facts identified by Plaintiffs. Should the Court determine that any issue identified in this statement is more properly considered an issue of law, it shall be so considered and Defendants incorporate it by reference into their Statement of Issues of Law. Defendants contend that the issues of fact (or mixed questions of fact and law) that remain to be litigated at trial and decided by the jury are as follows:

I. STATEMENT OF ISSUES OF CONTESTED FACTS FOR WHICH PLAINTIFFS BEAR THE BURDEN OF PROOF

A. Infringement

1. U.S. Patent No. 5,803,377 (“the ’377 patent”)

1. Whether Plaintiffs can show by a preponderance of the evidence that Defendants directly infringed claims 1, 11, 18, 19, and 27 of the ’377 patent under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, by making using, selling, offering to sell, or importing into the United States the MIC2000 mixing device.

2. U.S. Patent No. 7,144,150 (“the ’150 patent”)

2. Whether Plaintiffs can show by a preponderance of the evidence that Defendant Hamilton Beach directly infringed claims 15, 20, and 22 of the ’150

patent under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, by making, using, selling, offering to sell, or importing into the United States the MIC2000, BIC2000, and BIC3000-DQ devices.

3. Whether Plaintiffs can show by a preponderance of the evidence that Defendant Hershey Creamery directly infringed claims 15, 20, and 22 of the '150 patent under 35 U.S.C. § 271(a)¹, either literally or under the doctrine of equivalents, by making, using, selling, or offering to sell the MIC2000 mixing device.

3. U.S. Patent No. 7,520,658 (“the ’658 patent”)

4. Whether Plaintiffs can show by a preponderance of the evidence that Defendant Hamilton Beach directly infringed claims 1, 5, 6, 8, 9, 10 and 11 of the '658 patent under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, by making, using, selling, offering to sell, or importing into the United States the MIC2000, IMI2000, BIC2000, and BIC3000-DQ devices.

5. Whether Plaintiffs can show by a preponderance of the evidence that Defendant Hershey Creamery directly infringed claims 1, 5, 6, 8, 9, 10 and 11 of the '658 patent under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, by making, using, selling, or offering to sell the MIC2000 mixing device.

¹ Defendants note that ¶ 3 of Plaintiffs' Statement of Contested Facts to be Litigated at Trial (Ex. 2) references 35 U.S.C. § 271(c) instead of 35 U.S.C. § 271(a).

6. Whether Plaintiffs can show by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery infringed one or more of claims 1, 5, 6, 8, 9, 10 and 11 of the '658 patent under 35 U.S.C. § 271(b) by inducing acts by others that constituted infringement of the asserted claims of the '658 patent, with knowledge of the '658 patent, and including whether: (1) Defendants actively encouraged infringement, knowing that the acts they induced constituted patent infringement of the '658 patent, and (2) Defendants' encouraging acts actually resulted in direct infringement of the '658 patent.

7. Whether Plaintiffs can show by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery contributed, under 35 U.S.C. § 271(c), to infringement by others of one or more of claims 1, 5, 6, 8, 9, 10 and 11 of the '658 patent, including whether: (1) the accused component sold is a "material part of the invention," (2) knowledge that the accused component be "made or especially adapted for use in an infringement" with knowledge of the '658 patent; (3) the accused component has no substantial non-infringing uses; and (4) there is an underlying act of direct infringement of the '658 patent.

8. Whether Plaintiffs can show by a preponderance of the evidence that a single entity is responsible for the performance of each and every method step of method claims 6, 8, 9, 10 and 11 of the '658 patent when a consumer operates a

MIC2000 mixing device in a retail location participating in the Hershey Shake Shop Express program.

4. U.S. Patent No. 7,520,662 (“the ’662 patent”)

9. Whether Plaintiffs can show by a preponderance of the evidence that Defendant Hamilton Beach directly infringed claim 21 of the ’662 patent under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, by making, using, selling, offering to sell, or importing into the United States the MIC2000, IMI2000, BIC2000, and BIC3000-DQ devices.

10. Whether Plaintiffs can show by a preponderance of the evidence that Defendant Hershey Creamery directly infringed claim 21 of the ’662 patent under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, by making, using, selling, or offering to sell the MIC2000 mixing device.

11. Whether Plaintiffs can show by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery infringed claim 21 of the ’662 patent under 35 U.S.C. § 271(b) by inducing acts by others that constituted infringement of the asserted claim of the ’662 patent, with knowledge of the ’662 patent, and including whether: (1) Defendants actively encouraged infringement, knowing that the acts they induced constituted infringement of the ’662 patent, and (2) Defendants’ encouraging acts actually resulted in direct infringement of the ’662 patent.

12. Whether Plaintiffs can show by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery contributed, under 35 U.S.C. § 271(c), to infringement by others of claim 21 of the '662 patent, including whether: (1) the accused component sold is a “material part of the invention,” (2) knowledge that the accused component be “made or especially adapted for use in an infringement” with knowledge of the '662 patent; (3) the accused component has no substantial non-infringing uses; and (4) there is an underlying act of direct infringement of the '662 patent.

13. Whether Plaintiffs can show by a preponderance of the evidence that a single entity is responsible for the performance of each and every method step of claim 21 of the '662 patent when a consumer operates a MIC2000 mixing device in a retail location participating in the Hershey Shake Shop Express program.

B. Damages

14. In the event one or more of the asserted claims is found infringed and not invalid, whether Plaintiffs are entitled to a reasonable royalty based on a hypothetical negotiation and, if so, the amount.

15. In the event one or more of the asserted claims is found infringed and not invalid, whether Plaintiffs are entitled to lost profits as to the sales and use by Defendants of the MIC2000 mixing device and, if so, the amount. For establishing lost profits, whether Plaintiffs can also show by a preponderance of the evidence that

but for the alleged infringement: (1) f'real would have a changed its business model for only the Hershey customers to the 70¢ cup upcharge and \$150 monthly rental fee models; (2) it would have captured 74% of Hershey's customers based on the admitted non-infringing alternatives; and (3) f'real would have sold 3,197,793 more milkshake cups than Hershey did in the real world.

16. In the event one or more of the asserted claims is found infringed and not invalid, whether Plaintiffs are entitled to an award of either prejudgment and/or postjudgment interest.

17. In the event one or more of the asserted claims is found infringed and not invalid, whether Plaintiffs are entitled to an accounting for damages for post-verdict infringement and the amount of such damages.

18. Plaintiffs are precluded from asserting entitlement to enhanced damages under 35 U.S.C. § 284 because it is not properly before the Court in this stage of the case as willfulness will be tried separately, and in any event, Plaintiffs will be unable show entitlement to such damages.

19. It is premature to determine whether this is an exceptional case for either party pursuant to 35 U.S.C. § 285 as the issues of willfulness, inequitable conduct, and antitrust will be tried separately, and in any event, Plaintiffs will be unable show exceptional case.

20. It is premature to determine whether Plaintiffs are entitled to attorneys' fees, expenses, or costs and the amounts as issues will be tried separately from liability and damages, and in any event, Plaintiffs will be unable to show entitlement to attorneys' fees, expenses, or costs, and the amount.

21. It is premature to determine whether Plaintiffs are entitled to a permanent injunction as issues will be tried separately from liability and damages, and in any event, Plaintiffs will be unable to show entitlement to a permanent injunction.

22. It is premature to determine whether Plaintiffs are entitled to injunctive relief as issues will be tried separately from liability and damages, and in any event, Plaintiffs will be unable to show entitlement to an order that requires the recall, removal, seizure, or destruction of all accused products currently in the marketplace in lieu of damages.

23. Plaintiffs fail to assert what additional relief to which the Court may deem just and proper, and therefore, Plaintiffs will be unable to show entitlement to such additional relief.

C. Priority to Provisional Application

24. Whether Plaintiffs can show by a preponderance of the evidence that the '150 Patent is entitled to an earlier filing date based on the priority claim to U.S. Provisional Patent Application No. 60/426,622.

25. Whether Plaintiffs can show by a preponderance of the evidence that the '658 Patent is entitled to an earlier filing date based on the priority claim to U.S. Provisional Patent Application No. 60/426,622.

26. Whether Plaintiffs can show by a preponderance of the evidence that the '662 Patent is entitled to an earlier filing date based on the priority claim to U.S. Provisional Patent Application No. 60/426,622.

II. STATEMENT OF ISSUES OF CONTESTED FACT FOR WHICH DEFENDANTS BEAR THE BURDEN OF PROOF

A. Invalidity

1. The '377 Patent

27. Whether Defendants can prove by clear and convincing evidence that the alleged inventions set forth asserted claims 1, 11, 18, 19, and 27 of U.S. Patent No. 5,803,377 ("the '377 patent") would have been obvious to one of ordinary skill in the art at the time of the alleged invention in light of the state of the art and the following prior art references or combinations of references:

- a. U.S. Patent No. 3,295,997 ("Tomlinson") and U.S. Patent No. 3,147,958 ("Stiffler");
 - i. Claims 1, 11, 27—Tomlinson and Stiffler;
 - ii. Claim 18—Tomlinson, Stiffler, and U.S. Patent No. 4,637,221 ("Levine");

- iii. Claims 18 and 19—Tomlinson, Stiffler, Levine, and U.S. Patent No. 5,071,077 (“Arroubi”);
- b. Tomlinson and U.S. Patent No. 5,599,103 (“Linscott”):
 - i. Claims 1, 11, 27—Tomlinson and Linscott;
 - ii. Claim 18—Tomlinson, Linscott, and Levine;
 - iii. Claims 18 and 19—Tomlinson, Linscott, Levine, and Arroubi;
- c. U.S. Patent No. 2,995,158 (“Oberg”) and Stiffler:
 - i. Claims 1, 11, 27—Oberg and Stiffler;
 - ii. Claim 18—Oberg, Stiffler, and Levine;
 - iii. Claims 18 and 19—Oberg, Stiffler, Levine, and Arroubi;
- d. Oberg and Linscott:
 - i. Claims 1, 11, 27—Oberg and Linscott;
 - ii. Claim 18—Oberg, Linscott, and Levine;
 - iii. Claims 18 and 19—Oberg, Linscott, Levine, and Arroubi.

28. Facts underlying the Court’s ultimate determination concerning the obviousness of the “invention” claimed in each asserted claim of the ’377 Patent, as set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966):

- a. the scope and content of the prior art;
- b. the level of ordinary skill in the art;

- c. the differences between the alleged “inventions” of each asserted claim of the ’377 Patent and the prior art; and
- d. objective evidence of nonobviousness.

2. The ’150 Patent

29. Whether Defendants can prove by clear and convincing evidence that the alleged inventions set forth in claims 15, 20, and 22 of U.S. Patent No. 7,144,150 (“the ’150 Patent”) are anticipated by Japanese Patent Publication No. 1992-136787 U (“Sato”).

30. Whether Defendants can prove by clear and convincing evidence that the alleged inventions set forth in claims 15, 20, and 22 of the ’150 Patent would have been obvious to one of ordinary skill in the art at the time of the alleged invention in light of the state of the art and the following prior art references or combinations of references:

- a. Admitted Prior Art (“APA”):²
 - i. Claims 15, 20, and 22—APA, Sato, and U.S. Patent No. 4,740,088 (“Kelly”);
 - ii. Claims 15, 20, and 22—APA, Kelly, and U.S. Patent Publication No. 2002/0048626 (“Miller”);

² APA is prior art to the ’150 Patent because the patent applicant acknowledged in the intrinsic record of the ’150 Patent that it was known or used before the date of invention of the ’150 Patent.

- iii. Claims 15, 20, and 22—APA, Oberg, and Miller
 - iv. Claim 22—APA, Oberg, Miller, and U.S. Patent No. 6,164,575(“Karkos”);
 - v. Claim 22—APA, Kelly, Miller, and Karkos;
- b. Sato:
- i. Claims 15, 20, and 22—Sato and Oberg;
 - ii. Claims 15, 20, and 22—Sato and Kelly;
 - iii. Claims 15, 20, and 22—Sato, Oberg, and Kelly;
 - iv. Claims 15, 20, and 22—Sato, Oberg, and Miller;
 - v. Claims 15, 20, and 22—Sato, Kelly, and Miller;
 - vi. Claim 22—Sato, Oberg, and Karkos;
- c. U.S. Patent No. 5,439,289 (“Nielson”):
- i. Claims 15, 20, and 22—Neilson, Kelly, and Miller;
 - ii. Claims 15, 20, and 22—Neilson, Sato, and Kelly;
 - iii. Claims 15, 20, and 22—Neilson, Oberg, and Miller;
 - iv. Claim 22—Neilson, Kelly, Miller, and Karkos;
 - v. Claim 22—Neilson, Oberg, Miller, and Karkos.

31. Facts underlying the Court’s ultimate determination concerning the obviousness of the “invention” claimed in each asserted claim of the ’150 Patent, as set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966):

- a. the scope and content of the prior art;
- b. the level of ordinary skill in the art;
- c. the differences between the alleged “inventions” of each asserted claim of the ’150 Patent and the prior art; and
- d. objective evidence of nonobviousness.

32. Whether Defendants can prove by clear and convincing evidence that the ’150 Patent fails to name all of the inventors of one or more claims of the ’150 Patent.

33. Whether Defendants can prove by clear and convincing evidence that the alleged inventions claimed in the ’150 Patent are invalid because they were either (1) subject to an offer for sale or (2) sold more than one year prior to the earliest effective filing date of the ’150 patent.

3. The ’658 Patent

34. Whether Defendants can prove by clear and convincing evidence that the alleged inventions set forth in claims 1, 5, 6, 8, and 9 of U.S. Patent No. 7,520,658 (“the ’658 Patent”) are anticipated by Sato.

35. Whether Defendants can prove by clear and convincing evidence that the alleged inventions set forth in claims 1, 5, 6, and 8-11 of the ’658 Patent would have been obvious to one of ordinary skill in the art at the time of the alleged

invention in light of the state of the art and the following prior art references or combinations of references:

a. APA³

- i. Claims 1, 5, 6, and 8-11—APA and Sato;
- ii. Claims 1, 5, 6, and 8-11—APA, Sato, and Karkos;
- iii. Claims 1, 5, 6, and 8-11—APA, U.S. Patent No. 4,822,175 (“Barnard”), and Karkos;

b. Sato

- i. Claims 1, 5, 6, 8, and 9—Sato and Karkos;
- ii. Claims 1, 5, 6, and 8-11—Sato and Barnard;
- iii. Claims 1, 5, 6, and 8-11—Sato, Barnard, and Karkos;

c. Nielson

- i. Claims 1, 5, 6, and 8-11—Neilson and Sato;
- ii. Claims 1, 5, 6, and 8-11—Neilson, Sato, and Karkos;
- iii. Claims 1, 5, 6, and 8-11—Neilson, Barnard, and Karkos;

d. Oberg

- i. Claims 1, 5, 6, and 8-11—Oberg, Barnard, and Karkos.

³ APA is prior art to the '658 Patent because the patent applicant acknowledged in the intrinsic record of the '658 Patent that it was known or used before the date of invention of the '658 Patent.

36. Facts underlying the Court’s ultimate determination concerning the obviousness of the “invention” claimed in each asserted claim of the ’658 Patent, as set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966):

- a. the scope and content of the prior art;
- b. the level of ordinary skill in the art;
- c. the differences between the alleged “inventions” of each asserted claim of the ’658 Patent and the prior art; and
- d. objective evidence of nonobviousness.

37. Whether Defendants can prove by clear and convincing evidence that the ’658 Patent fails to name all of the actual inventors of one or more claims of the ’658 Patent.

38. Whether Defendants can prove by clear and convincing evidence that the alleged inventions claimed in the ’658 Patent are invalid because they were either (1) subject to an offer for sale or (2) sold more than one year prior to the earliest effective filing date of the ’658 patent.

4. The ’662 Patent

39. Whether Defendants can prove by clear and convincing evidence that the alleged invention set forth in claim 21 of U.S. Patent No. 7,520,662 Patent (“the ’662 Patent”) would have been obvious to one of ordinary skill in the art at the time

of the alleged invention in light of the state of the art and the following prior art references or combinations of references:

a. APA⁴

- i. APA, Kelly, and Miller;
- ii. APA, Sato, and Miller;
- iii. APA, Sato, Miller, and U.S. Patent No. 1,592,788 (“Supervielle”);
- iv. APA, Sato, and Supervielle

b. Nielson

- i. Nielson, Sato, and Miller;
- ii. Nielson, Sato, and Supervielle;
- iii. Nielson, Sato, Miller, and Supervielle.

40. Facts underlying the Court’s ultimate determination concerning the obviousness of the “invention” claimed in each asserted claim of the ’662 Patent, as set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966):

- a. the scope and content of the prior art;
- b. the level of ordinary skill in the art;
- c. the differences between the alleged “inventions” of each asserted claim of the ’662 Patent and the prior art; and

⁴ APA is prior art to the ’662 Patent because the patent applicant acknowledged in the intrinsic record of the ’662 Patent that it was known or used before the date of invention of the ’662 Patent.

d. objective evidence of nonobviousness.

41. Whether Defendants can prove by clear and convincing evidence that the '666 Patent fails to name all of the actual inventors of one or more claims of the '662 Patent.

42. Whether Defendants can prove by clear and convincing evidence that the alleged inventions claimed in the '662 Patent are invalid because they were either (1) subject to an offer for sale or (2) sold more than one year prior to the earliest effective filing date of the '662 patent.

5. Remedies

43. To the extent the Court determines that motions for exceptional case pursuant to 35 U.S.C. § 285 may be raised at this stage of the litigation, whether Defendants are entitled to attorneys' fees, expenses, or costs, and the amount.

44. To the extent the Court determines Defendants are entitled to any alternative remedy, whether Defendants are entitled to any further relief that the Court deems just and proper.

PRETRIAL ORDER

EXHIBIT 4

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

EXHIBIT 4:

Plaintiffs' Statement of Issues of Law to be Litigated at Trial

Plaintiffs respectfully submit this Statement of Issues of Law, which is based on Plaintiffs' claims and Plaintiffs' current understanding of the defenses and counterclaims of Defendants Hamilton Beach and Hershey Creamery and the proceedings in this action to date.

To the extent Plaintiffs' Statement of Issues of Fact That Remain to be Litigated set forth in **Exhibit 2** contains issues of law, those issues are incorporated herein by reference. Likewise, should the Court determine that any issue identified below is more appropriately considered an issue of fact, Plaintiffs incorporate such issues by reference into **Exhibit 2**. By including an issue herein, Plaintiffs do not assume the burden of proof or production with regard to that issue. Plaintiffs reserve the right to revise this statement in light of the Court's rulings, in response to Defendants' positions, or as otherwise may be appropriate. The following statements are not exhaustive, and Plaintiffs reserve the right to prove any matters identified in their pleadings, infringement contentions, interrogatory responses, and/or expert reports. Plaintiffs also intend to offer evidence as to the issues of fact and issues of law identified in this pretrial order. Plaintiffs further intend to offer evidence to rebut evidence offered by Defendants, and to argue that Defendants are precluded from offering evidence in support of theories and claims not adequately disclosed in accordance with the scheduling order. Plaintiffs

incorporate by reference their expert reports in support of any proof to be presented by expert testimony.

Plaintiffs reserve the right to rely upon the legal authorities cited by Defendants in their corresponding exhibit, **Exhibit 5**.

I. Issues on Which Plaintiffs Bear the Burden of Proof

A. Infringement

1. Infringement of U.S. Patent No. 5,803,377 (the “’377 patent”)

1. Whether Plaintiffs have proven by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery have directly infringed under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, the asserted claims of the ’377 patent by making, using, offering to sell, selling or importing into the United States the MIC2000 accused product.

2. Infringement of U.S. Patent Nos. 7,144,150 (the “’150 patent”); 7,520,658 (the “’658 patent”); or 7,520,662 (the “’662 patent”)

2. Whether Plaintiffs have proven by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery have directly infringed under 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, the asserted claims of the ’150, ’658, or ’662 patents by making, using, offering to sell, selling or importing into the United States the MIC2000, BIC2000, IMI2000, or BIC3000-DQ accused products. The asserted claims are: claims 15, 20, and 22 of the ’150

patent (MIC2000, BIC2000, and BIC3000-DQ); claims 1, 5, 6, 8, 9, 10, and 11 of the '658 patent (MIC2000, BIC2000, IMI2000, and BIC3000-DQ); and claim 21 of the '662 patent (MIC2000, BIC2000, IMI2000 and BIC3000-DQ).

3. Whether Plaintiffs have proven by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery have infringed claims 6, 8, 9, 10, or 11 of the '658 patent or claim 21 of the of the '662 patent under 35 U.S.C. § 271(b) by inducing acts that constituted infringement of those patents with knowledge of those patents.

4. Whether Plaintiffs have proven by a preponderance of the evidence that Defendants Hamilton Beach or Hershey Creamery contributed, under 35 U.S.C. § 271(c), to another's infringement of the asserted claims of the '658 or '662 patents.

3. Legal Authority

a. Direct Infringement

5. Direct infringement occurs when “whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor” 35 U.S.C. § 271(a). A lease or rental of an infringing product is a sale under § 271(a). *See Transocean Offshore Deepwater Drilling, Inc. v. Stena Drilling Ltd.*, 659 F. Supp. 2d 790, 798-99 (S.D. Tex. 2009) (Sales under § 271(a)

may include licenses, leases, or rentals; analogizing sales under § 271(a) to sales under § 102(b) as set forth in *Minton v. National Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373 (Fed.Cir. 2003) and *In re Kollar*, 286 F.3d 1326 (Fed.Cir. 2002)).

6. “Infringement is a question of fact.” *Sunovion Pharm., Inc. v. Teva Pharm. USA, Inc.*, 731 F.3d 1271, 1275 (Fed. Cir. 2013).

7. “Direct infringement requires a party to perform each and every step or element of a claimed method or product.” *Forest Labs. Holdings Ltd. v. Mylan Inc.*, 206 F. Supp. 3d 957, 973 (D. Del. 2016) (quoting *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1320 (Fed. Cir. 2009)). “To prove infringement, the patentee must show that the accused device meets each claim limitation, either literally or under the doctrine of equivalents.” *Deering Precision Instruments, L.L.C. v. Vector Distribution Sys., Inc.*, 347 F.3d 1314, 1324 (Fed. Cir. 2003). Plaintiffs’ burden of proof is preponderance of the evidence. *See Cross Med. Prod., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1310 (Fed. Cir. 2005). “Determination of a claim of infringement involves a two step inquiry. First, the claims are construed, a question of law in which the scope of the asserted claims is defined. Second, the claims, as construed, are compared to the accused device. This is a question of fact.” *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001) (internal citations omitted). “[L]imitations cannot be read into the claims from the specification or the

prosecution history.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999).

8. “A patentee may prove direct infringement or inducement of infringement by either direct or circumstantial evidence.” *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1219 (Fed. Cir. 2006).

**b. Infringement Under the Doctrine of
Equivalents**

9. “[A] product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). A claim limitation’s “equivalent” is found in an accused product only “where an ‘equivalent’ differs from the claimed limitation only insubstantially.” *Enzo Biochem Inc v. Applera Corp.*, 702 F. App’x 971, 976 (Fed. Cir. 2017). “Whether a component in the accused subject matter performs substantially the same function as the claimed limitation in substantially the same way to achieve substantially the same result may be relevant to this determination.” *Id.* (internal citation and quotation omitted). Infringement under the doctrine of equivalents is a question of fact. *Stryker Corp. v. Davol Inc.*, 234 F.3d 1252, 1258 (Fed. Cir. 2000).

c. Induced Infringement

10. Under 35 U.S.C. § 271(b), “[w]hoever actively induces infringement of a patent shall be liable as an infringer.” “In contrast to direct infringement, liability for inducing infringement attaches only if the defendant knew of the patent and that the induced acts constitute patent infringement.” *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015) (internal quotation marks and citation omitted). “[W]illful blindness can satisfy the knowledge requirement for active inducement under § 271(b) (and for contributory infringement under § 271(c)), even in the absence of actual knowledge.” *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, 824 F.3d 1344, 1347 (Fed. Cir. 2016). “A patentee may prove direct infringement or inducement of infringement by either direct or circumstantial evidence.” *Liquid Dynamics*, 449 F.3d at 1219.

d. Contributory Infringement

11. Under 35 U.S.C. § 271(c), “[w]hoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.” “Like

induced infringement, contributory infringement requires knowledge of the patent in suit and knowledge of patent infringement.” *Commil USA, LLC*, 135 S. Ct. at 1926. “[W]illful blindness can satisfy the knowledge requirement . . . for contributory infringement under § 271(c)[] , even in the absence of actual knowledge.” *Warsaw Orthopedic, Inc.*, 824 F.3d at 1347.

B. Damages and Other Relief

12. Whether Plaintiffs have proven that they are owed damages for Defendants’ infringement of the ’377, ’150, ’658, or ’662 patents and, if so, in what amount.

13. Whether Plaintiffs have proven that they are entitled to accounting of damages for post-trial infringement of the ’150, ’658, or ’662 patents and, if so, in what amount.

14. Whether Plaintiffs have proven that they are entitled to a permanent injunction enjoining Defendants and their officers, employees, agents, attorneys, affiliates, successors, assigns, and others acting in privity or concert with them from further infringement of the ’150, ’658, and ’662 patents.

15. Whether Plaintiffs have proven that they are entitled to an order, as part of the injunctive relief, which requires the recall, removal, seizure, or destruction of all infringing products currently in the marketplace.

16. Whether Plaintiffs have proven that they are entitled to enhanced damages under 35 U.S.C. § 284 for Defendants' infringement of the '377, '150, '658, or '662 patents and, if so, in what amount.

17. Whether Plaintiffs have proven that they are entitled to an award of attorneys' fees and costs under 35 U.S.C. § 285 and, if so, in what amount.

18. Whether Plaintiffs have proven that they are entitled to any other relief that this Court may deem just and proper.

1. Legal Authority

a. Damages in General

19. Under 35 U.S.C. § 284, upon a finding of infringement, "the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." "[T]he amount of a prevailing party's damages is a finding of fact on which the plaintiff bears the burden of proof by a preponderance of the evidence." *Smithkline Diagnostics, Inc. v. Helena Labs. Corp.*, 926 F.2d 1161, 1164 (Fed. Cir. 1991). "The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances." 35 U.S.C. § 284.

20. The purpose of compensatory damages is to make the patent owner "whole" or "fully compensate" him for the infringement, such that the patent

owner is restored to the financial position he would have been in had the infringement not occurred. *Lucent Technologies, Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009); *Rite- Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (en banc), *cert. denied*, 516 U.S. 867 (1995) (“[T]he Supreme Court has interpreted [Section 284] to mean that ‘adequate’ damages should approximate those damages that will *fully compensate* the patentee for infringement.”) (emphasis in original).

21. Depending on the circumstances of the case, compensatory damages may take the form of (1) lost profits, (2) an established royalty, or (3) a reasonable royalty. *SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 926 F.2d 1161, 1167 & n.5 (Fed. Cir. 1991). As a general matter, a “patentee may seek to recover actual damages, usually, the amount of profits actually lost, or if unable to prove actual damages, the patentee is entitled to a reasonable royalty.” *Id.* at 1164.

b. Lost Profits

22. “To recover lost profits damages for patent infringement, the patent owner must show that it would have received the additional profits “but for” the infringement. The patent owner bears the burden to present evidence sufficient to show a reasonable probability that it would have made the asserted profits absent infringement.” *King Instruments Corp. v. Perego*, 65 F.3d 941, 952 (Fed. Cir. 1995). “When basing the alleged lost profits on lost sales, the patent owner has an

initial burden to show a reasonable probability that he would have made the asserted sales ‘but for’ the infringement. Once the patent owner establishes a reasonable probability of ‘but for’ causation, ‘the burden then shifts to the accused infringer to show that [the patent owner’s “but for” causation claim] is unreasonable for some or all of the lost sales.’” *Grain Processing Corp. v. Am. Maize-Prod. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999) (quoting *King Instruments Corp.*, 65 F.3d at 952).

23. “There is no particular required method to prove but for causation” in patent cases. *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1284 (Fed. Cir. 2017). “One useful, but non-exclusive method to establish the patentee’s entitlement to lost profits is the Panduit test first articulated by the Sixth Circuit” in *Panduit Corp. v. Stahl Brothers Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1978). *Mentor Graphics*, 851 F.3d at 1284 (internal quotation marks and citation omitted). Under the *Panduit* test, a patentee is entitled to lost profits if it can establish: (1) “demand for the patented product”; (2) “absence of acceptable noninfringing substitutes”; (3) “manufacturing and marketing capability to exploit the demand”; and (4) “the amount of profit [the patentee] would have made.” 575 F.2d at 1156.

24. “The first factor—demand for the patented product—considers demand for the product as a whole.” *Mentor Graphics*, 851 F.3d at 1285 (citing

DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1330-31 (Fed. Cir. 2009)). “This factor does not require any allocation of consumer demand among the various limitations recited in a patent claim.” *DePuy*, 567 F.3d at 1330.

25. “The second factor—the absence of non-infringing alternatives — considers demand for particular limitations or features of the claimed invention.” *Mentor Graphics*, 851 F.3d at 1285 (citing *DePuy*, 567 F.3d at 1331).

26. “[I]f purchasers are motivated to purchase because of particular features available only from the patented product, products without such features—even if otherwise competing in the marketplace—would not be acceptable noninfringing substitutes.” *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1373 (Fed. Cir. 1991). Similarly, “products lacking the advantages of the patented invention ‘can hardly be termed a substitute acceptable to the customer who wants those advantages.’” *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 702 F.3d 1351, 1362 (Fed. Cir. 2012), quoting *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 901-02 (Fed. Cir. 1986); see also *Radio Steel & Mfg. Co. v. MTD Prods., Inc.*, 788 F.2d 1554, 1556 (Fed. Cir. 1986) (affirming district court’s finding of no acceptable, noninfringing alternatives where “[t]he various [proposed alternative] wheelbarrows to which [infringer] refers incorporate only some, but not all, of the elements of the patent.”). This is especially true where the

“proposed non-infringing substitutes are not adequate substitutes in the same market” and/or the market is moving away from the proposed non-infringing substitute to the infringing design. *Presidio*, 702 F.3d at 1361.

27. “The patent holder does not need to negate all possibilities that a purchaser might have bought a different product or might have foregone the purchase altogether” in order to satisfy the second *Panduit* factor. *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1577 (Fed. Cir. 1989), *quoting Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 21 (Fed. Cir. 1984)) (emphasis in original); *see also Izumi Prods. Co. v. Koninklijke Philips Elecs. N.V.*, 315 F.Supp.2d 589, 613 (D. Del. 2004) (“A patentee need not negate every possibility that a purchaser might have bought a product other than its own.”).

28. As an alternative to demonstrating the absence of acceptable, noninfringing alternatives under the second *Panduit* element, a patentee can use a market share approach where the patentee recovers lost profits on the percentage of infringing sales equal to its market share. *See, e.g., BIC Leisure Prods., Inc. v. Windsurfing Intern., Inc.*, 1 F.3d 1214, 1219 (Fed. Cir. 1993) (“This court has held that a patent owner may satisfy the second *Panduit* element by substituting proof of its market share for proof of the absence of acceptable substitutes. This market share approach allows a patentee to recover lost profits, despite the presence of

acceptable, noninfringing substitutes, because it nevertheless can prove with reasonable probability sales it would have made ‘but for’ the infringement.”) (internal citation omitted); *Oscar Mayer Foods Corp. v. ConAgra, Inc.*, Nos. 94-1247, 94-1248, 1994 WL 712488 at *8 (Fed. Cir. Dec. 22, 1994) (“[T]his court has previously approved proof of market share as a substitute for proving the absence of acceptable, noninfringing alternatives.”); *Mor-Flo*, 883 F.2d at 1577-78 (When a market share approach is applied “the presence or absence of acceptable noninfringing alternatives does not matter. The question then becomes whether an established market share combined with the other Panduit factors is sufficient to show [patentee’s] loss to a reasonable probability.”); *Cryovac Inc. v. Pechiney Plastic Packaging, Inc.*, 430 F.Supp.2d 346, 362 (D. Del. 2006) (“[D]amages for lost profits may be awarded, even where there are non-infringing alternatives, based on a patentee’s previous share of the market. Thus, even if [a competitor] did produce a product that was a non-infringing alternative, it is possible for [the patentee] to be awarded lost profits damages based on the market share it held prior to [the infringer’s] entrance into the market.”); *Izumi*, 315 F.Supp.2d at 614 (“[A]warding lost profits based on market share is proper if the patentee shows an established market share in lieu of the absence of acceptable noninfringing alternatives and, at the same time, meets the three other Panduit factors.”); *Procter & Gamble Co. v. Paragon Trade Brands, Inc.*, 989 F.Supp. 547, 601 (D. Del.

1997) (“[A] patent owner may satisfy the second prong of the Panduit test by proving its share of the market in lieu of proof of the absence of acceptable substitutes. Under this approach, a patentee recovers lost profits on the percentage of infringing sales equal to its market share.”) (citations omitted); *see also Mentor Graphics*, 851 F.3d at 1286 n.5; *Ericsson, Inc. v. Harris Corp.*, 352 F.3d 1369, 1377 (Fed. Cir. 2003); *Crystal Semiconductor Corp.*, 246 F.3d at 1353-55; *TruePosition Inc. v. Andrew Corp.*, 568 F.Supp.2d 500, 524 n.31 (D. Del. 2008); *C.R. Bard, Inc. v. Boston Sci. Corp.*, C.A. No. 95-215-JJF, 1998 WL 34181945, at *2 (D. Del. Nov. 30, 1998).

c. Reasonable Royalty

29. “A patentee receives a reasonable royalty for any of the infringer’s sales not included in the lost profit calculation.” *Crystal Semiconductor Corp. v. TriTech Microelectronics Int’l, Inc.*, 246 F.3d 1336, 1354 (Fed. Cir. 2001); *see also Mentor Graphics*, 851 F.3d at 1286 (“For sales in which the patentee cannot prove the elements necessary to establish entitlement to lost profits, the statute guarantees the patentee a reasonable royalty for those sales.”).

30. While the patent statute provides a floor of “a reasonable royalty for the use made of the invention by the infringer,” 35 U.S.C. § 284, it provides no method for defining a “reasonable” royalty, an exercise that “is not an exact science.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir.

2015). One approach to determining a reasonable royalty is the “hypothetical negotiation” approach, which the Federal Circuit has held is a reasonable method. *See Summit 6*, 802 F.3d at 1299; *see also Lucent Technologies, Inc.*, 580 F.3d at 1324-25. The hypothetical negotiation approach “‘attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began.’” *Id.*

31. The fifteen factors identified in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), are most commonly used for this analysis. The *Georgia-Pacific* factors are:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor’s established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.

6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.

7. The duration of the patent and the term of the license.

8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had

been reasonably and voluntarily trying to reach an agreement.

32. While the Federal Circuit has approved the use of the *Georgia-Pacific* factors in numerous decisions and district courts have repeatedly applied the analysis, the factors are not exclusive, and some or all of the factors may be relevant to a particular case, depending on the facts of the case. *See, e.g., Minks v. Polaris Industries, Inc.*, 546 F.3d 1364, 1372 (Fed. Cir. 2008); *Dow Chemical Co. v. Mee Industries, Inc.*, 341 F.3d 1370, 1382 (Fed. Cir. 2003); *Rite-Hite Corp.*, 56 F.3d at 1555; *Energy Transp. Gp., Inc. v. Sonic Innovations, Inc.*, C.A. No. 05-422 (GMS), 2011 WL 2222066, at *21 n.29 (D. Del. June 7, 2011).

33. As described in *Georgia-Pacific*, there is no mathematical formula to determining reasonable royalties:

[A] multiplicity of inter-penetrating factors bear[s] upon the amount of a reasonable royalty. But there is no formula by which these factors can be rated precisely in the order of their relative importance or by which their economic significance can be automatically transduced into their pecuniary equivalent. . . . In discharging its responsibility as fact finder, the Court has attempted to exercise a discriminating judgment reflecting its ultimate appraisal of all pertinent factors in the context of the credible evidence.

Georgia-Pacific, 318 F. Supp. at 1120-21 (S.D.N.Y. 1970). “Any reasonable royalty analysis ‘necessarily involves an element of approximation and uncertainty.’” *Lucent Technologies Inc.*, 580 F.3d at 1325, citing *Unisplay, S.A. v.*

Am. Elec. Sign Co., 69 F.3d 512, 517 (Fed. Cir. 1995). In *Summit 6*, the Federal Circuit held “[t]his court has recognized that estimating a reasonable royalty is not an exact science. The record may support a range of reasonable royalties, rather than a single value. Likewise, there may be more than one reliable method for estimating a reasonable royalty.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015). “All approaches have certain strengths and weaknesses, and, depending upon the facts, one or all may produce admissible testimony in a particular case. Because each case presents unique circumstances and facts, it is common for parties to choose different, reliable approaches in a single case and, when they do, the relative strengths and weaknesses of each approach may be exposed at trial or attacked during cross-examination. That one approach may better account for one aspect of a royalty estimation does not make other approaches inadmissible.” *Id.*

34. Where the accused product includes both an allegedly patented feature and unpatented or conventional features, “damages awarded for patent infringement ‘must reflect the value attributable to the infringing features of the product, and no more.’” *CSIRO v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015) (quoting *Ericsson, Inc. v. D-Link Sys.*, 773 F. 3d 1201, 1226 (Fed. Cir. 2014)); see also *Exmark Mfg. Co., Inc. v. Briggs & Stratton Power Prod. Grp., LLC*, 879 F.3d 1332, 1347-48 (Fed. Cir. 2018). Such apportionment can be

applied to the royalty rate or the royalty base, or a combination of both. *Exmark Mfg.*, 879 F.3d at 1348.

d. Willful Infringement

35. The Court has determined that the issue of whether Plaintiffs can prove by a preponderance of the evidence that Defendants' infringement was willful will be determined by a jury separate from the issues of infringement, validity, and damages to be heard at the trial starting April 29, 2019. 1/18/19 Oral Order. Based on the Court's order and by agreement of the parties, the issue of willful infringement is not included in this Pretrial Order.

e. Pre-Judgment and Post-Judgment Interest

36. "Prejudgment interest shall ordinarily be awarded absent some justification for withholding such an award." *Nickson Indus., Inc. v. Rol Mfg. Co., Ltd.*, 847 F.2d 795, 800 (Fed. Cir. 1988), citing *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983)). "[P]rejudgment interest should be awarded from the date of infringement to the date of judgment." *Id.*, citing *General Motors*, 461 U.S. at 656. Under 28 U.S.C. § 1961(a), "interest shall be allowed on any money judgment in a civil case recovered in a district court." "Post-judgment interest is awarded on monetary judgments recovered in all civil cases," including ones for patent infringement. *Transmatic, Inc. v. Gulton Indus., Inc.*, 180 F.3d 1343, 1347 (Fed. Cir. 1999). Post-judgment interest is governed by regional

circuit law. *Id.* at 1348. Interest begins to accrue on the date of the entry of judgment. *Loughman v. Consol-Pennsylvania Coal Co.*, 6 F.3d 88, 97 (3d Cir. 1993).

37. Courts in this district routinely award post-judgment interest in patent infringement cases. *See nCUBE Corp. v. SeaChange Int’l, Inc.*, 313 F. Supp. 2d 361, 392 (D. Del. 2004), *aff’d*, 436 F.3d 1317 (Fed. Cir. 2006) (awarding post-judgment interest for patent infringement); *TruePosition Inc. v. Andrew Corp.*, 611 F. Supp. 2d 400, 414 (D. Del. 2009), *aff’d*, 389 F. App’x 1000 (Fed. Cir. 2010) (same).

f. Enhanced Damages

38. Under 35 U.S.C. § 284, the “court may increase the damages up to three times the amount found or assessed.” “That language contains no explicit limit or condition, and we have emphasized that the word ‘may’ clearly connotes discretion.” *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1931 (2016) (internal citations omitted).

39. The Federal Circuit has set forth several factors that the Court may consider in determining whether to award enhanced damages:

- (1) whether the infringer deliberately copied the ideas or design of another;

- (2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed;
- (3) the infringer's behavior as a party to the litigation;
- (4) defendant's size and financial condition;
- (5) closeness of the case;
- (6) duration of defendant's misconduct;
- (7) remedial action by the defendant;
- (8) defendant's motivation for harm; and
- (9) whether defendant attempted to conceal its misconduct.

Liquid Dynamics Corp. v. Vaughan Co., 449 F.3d 1209, 1225 (Fed. Cir. 2006), citing *Read Corp. v. Portec. Inc.*, 970 F.2d 816, 826–27 (Fed. Cir. 1992), superseded on other grounds as recognized in *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1578 (Fed. Cir. 1996)); see also *Apple Inc. v. Samsung Electronics Co., Ltd.*, 258 F. Supp. 3d 1013, 1030 (N.D. Cal. 2017) (“After *Halo*’s elimination of ‘rigid formulas,’ trial courts now look to the Read factors as ‘useful guideposts’ even though they ‘are no longer the sole set of criteria’ that can be considered.”) (quoting *Finjan, Inc. v. Blue Coat Sys., Inc.*, 2016 WL 3880774, at *16 (N.D. Cal. July 18, 2016)).

40. A patentee may obtain enhanced damages under 35 U.S.C. § 284 where it establishes that the defendant’s infringement was “willful.” *Halo*, 136 S. Ct. at 1931; *In re Seagate Tech., LLC*, 497 F.3d 1360, 1368 (Fed. Cir. 2007). However, willfulness is not required for enhanced damages. *Halo*, 136 S. Ct. at 1931-33 (“Section 284 allows district courts to punish the full range of culpable behavior. Yet none of this is to say that enhanced damages must follow a finding of egregious misconduct. As with any exercise of discretion, courts should continue to take into account the particular circumstances of each case in deciding whether to award damages, and in what amount.”); *Finjan, Inc. v. Blue Coat Systems, Inc.*, 2016 WL 3880774, *16 (N.D. Cal. 2016) (“‘The sort of conduct warranting enhanced damages has been variously described in our cases as willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate.’ In other words, while willfulness may support a finding of enhancement, *Halo* does not hold that willfulness is necessary for enhanced damages.”). Moreover, “[t]he subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless.” *Halo*, 136 S. Ct. at 1933

41. “[P]atent-infringement litigation has always been governed by a preponderance of the evidence standard. Enhanced damages are no exception.” *Halo*, 136 S. Ct. at 1931 (internal quotation marks and citation omitted).

g. Permanent Injunctive Relief

42. Under 35 U.S.C. § 283, the Court “may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.” 35 U.S.C. § 283. “The decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court.” *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

43. To obtain an injunction under § 283, “[a] plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.” *eBay*, 547 U.S. at 391.

44. “Where two companies are in competition against one another, the patentee suffers the harm - often irreparable - of being forced to compete against products that incorporate and infringe its own patented inventions.” *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1345 (Fed. Cir. 2013). “The patentee’s unwillingness to license the patented technology also weighs in favor of a finding of irreparable harm.” *Evonik Degussa GmbH v. Materia, Inc.*, Civ. No.

09-636 (NLH/JS), 2017 WL 3434156, at *1 (D. Del. Aug. 9, 2017), citing *Presidio*, 702 F.3d at 1363-64.

45. The nature of the competitive relationship between [the parties], as well as the patentee's unwillingness to license the patented technology, also weigh in favor of a conclusion that the patentee has no adequate remedy at law. *See Acumed LLC v. Stryker Corp.*, 551 F.3d 1323, 1327-28 (Fed. Cir. 2008); *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1337 (Fed. Cir. 2012) ("As the district court correctly observed, the issues of irreparable harm and adequacy of remedies at law are inextricably intertwined."); *Evonik*, 2017 WL 3434156 at *2. "Additionally, 'a patent holder's . . . engagement in lengthy litigation to protect [the] business decision,' [not to license the patented technology] as occurred here, also weighs in favor of finding the remedy at law inadequate." *Sanofi-Aventis Deutschland GmbH v. Glenmark Pharms. Inc., USA*, 821 F. Supp. 2d 681, 694 (D.N.J. 2011) (quoting Federal Judicial Center's Patent Case Management Judicial Guide Table 9.1 (2009)).

46. Balancing the hardships between the parties "assesses the relative effect of granting or denying an injunction on the parties." *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 645 (Fed. Cir. 2015). Factors that may be considered "include[] the parties' sizes, products, and revenue sources." *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 862 (Fed. Cir. 2010). "A party cannot escape an

injunction simply because it is smaller than the patentee or because its primary product is an infringing one.” *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1156 (Fed. Cir. 2011); *Evonik*, 2017 WL 3434156 at *3. Furthermore, the balance of the hardships does not favor the defendant when “[a]ny harms Defendants may suffer as a result of an injunction ‘were almost entirely preventable and were the result of its own calculated risk.’” *Sanofi-Aventis Deutschland GmbH*, 821 F. Supp. 2d at 695, quoting *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1383 (Fed. Cir. 2006).

47. “[T]he public interest nearly always weighs in favor of protecting property rights in the absence of countervailing factors, especially when the patentee practices his inventions. ‘The encouragement of investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude.’” *Apple*, 809 F.3d at 647, quoting *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1383 (Fed. Cir. 2006)); *see also Sanofi-Aventis Deutschland GmbH*, 821 F. Supp. 2d at 696 (“If generic pharmaceutical companies were free to disregard patent rights and simply piggy back off the innovations of others, then the incentives the patent system is designed to promote, namely those that encourage continued investment in costly drug development, would disappear.”).

48. The Court has the power to order the recall, seizure, or destruction of any infringing products that are in the marketplace to prevent further acts of

infringement. *See Birdsell v. Shaliol*, 112 U.S. 485, 488-89 (1884) (“[A]n infringer does not, by paying damages for making and using a machine in infringement of a patent, acquire any right himself to the future use of the machine. On the contrary, he may, in addition to the payment of damages for past infringement, be restrained by injunctions from further use, and, when the whole machine is an infringement of the patent, be ordered to deliver it up to be destroyed. No more does one, who pays damages for selling a machine in infringement of a patent, acquire for himself or his vendee any right to use that machine.”); *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1564-65 (Fed. Cir. 1984) (“The district court may frame an effective injunction against Nyman’s ‘use’ of the patented display by specifying that such use includes the furnishing of the racks to the customers, and that to terminate such use Nyman must recall the racks from its customers.”); *See also Fisher-Price, Inc. v. Safety 1st, Inc.*, 2008 WL 1976624, *3 (D. Del. 2008) (holding infringer in contempt for not exercising all reasonable efforts to retrieve infringing product from the retailers it sold to); *Fisher-Price, Inc. v. Safety 1st, Inc.*, 279 F. Supp. 2d 526, 530 (D. Del. 2003) (ordering recall of infringing products from the defendants’ customers).

**h. Attorneys' Fees and Costs under 35
U.S.C. § 285**

49. If it is determined that Defendants infringe one or more of the Asserted claims of any Asserted Patent not found invalid, the Court will determine whether to award attorneys' fees.

50. Under 35 U.S.C. § 285, "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." "This text is patently clear. It imposes one and only one constraint on district courts' discretion to award attorney's fees in patent litigation: The power is reserved for 'exceptional' cases." *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1755-56 (2014). "[A]n 'exceptional' case is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." *Id.* at 1756. District courts may determine whether a case is 'exceptional' in the case-by-case exercise of their discretion, considering the totality of the circumstances. *Id.*

51. Attorney fees may be awarded for willful infringement, misconduct during litigation, vexatious or unjustified litigation, conduct that violates Fed. R. Civ. P. 11, or like infractions. *Octane*, 134 S. Ct. at 1756. However, attorneys' fees are not limited independently sanctionable conduct. *Id.* at 1756-57. Moreover, a "district court may award fees in the rare case in which a party's

unreasonable conduct—while not necessarily independently sanctionable—is nonetheless so ‘exceptional’ as to justify an award of fees.” *Id.* at 1757. “[A] case presenting either subjective bad faith or exceptionally meritless claims may sufficiently set itself apart from mine-run cases to warrant a fee award.” *Id.*

52. A prevailing party must establish its entitlement to fees under 35 U.S.C. § 285 by a preponderance of the evidence. *Id.* at 1758.

II. Issues on Which Defendants Bear the Burden of Proof

A. Validity of the Asserted Patents

53. Whether Defendants have proven by clear and convincing evidence that the prior art references they rely on qualify under 35 U.S.C. § 102 as prior art for the claims against which they are asserted.

54. Whether Defendants have proven by clear and convincing evidence that any asserted claim of the ’150 or ’658 patents are invalid as anticipated under 35 U.S.C. § 102.

55. Whether Defendants have proven by clear and convincing evidence that any asserted claim of the ’377, ’150, ’658, or ’662 patents are invalid as obvious under 35 U.S.C. § 103.

56. Whether Defendants have proven by clear and convincing evidence that any asserted claim of the ’377, ’150, ’658, or ’662 patents is invalid as indefinite under 35 U.S.C. § 112.

57. Whether Defendants have proven by clear and convincing evidence that any claim of the '150, '658, or '662 patents is invalid for failing to name the proper inventors. In the event that Defendants have so proven, whether Plaintiffs may invoke 35 U.S.C. § 256 to correct inventorship.

58. Whether Defendants have proven by clear and convincing evidence that any claim of the '150, '658, or '662 patents is invalid because the claimed inventions were on sale more than one year before the effective filing date of those patents.

59. In the event that Defendants have made a prima facie case of obviousness for any asserted claim, whether Defendants can rebut secondary considerations of non-obviousness for those claims.

1. Legal Authority

a. Presumption of Validity and Burdens

60. All issued patents are presumed valid. 35 U.S.C. § 282; *Novo Nordisk A/S v. Caraco Pharm. Labs., Ltd.*, 719 F.3d 1346, 1352 (Fed. Cir. 2013) (“It is black-letter law that a patent is presumed valid.”). Defendants bear the burden of proving their invalidity defenses by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 131 S. Ct. 2238, 2242 (2011); *Sciele Pharma Inc. v. Lupin Ltd.*, 684 F. 3d 1253, 1260 (Fed. Cir. 2012) (“The district court is correct that there is a ‘high burden of proof created by the necessary deference to

the PTO.’ . . . This notion stems from our suggestion that the party challenging a patent in court ‘bears the added burden of overcoming the deference that is due to a qualified government agency presumed to have done its job.’”), *quoting PharmaStem Therapeutics, Inc. v. Viacell, Inc.*, 491 F.3d 1342, 1366 (Fed. Cir. 2007); *State Contracting & Eng’g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1067 (Fed. Cir. 2003). Defendants bear this burden throughout the entirety of the litigation. *Novo Nordisk*, 719 F.3d at 1352 (“[B]ecause the presumption of validity remains intact . . . throughout the litigation, the burden of persuasion never shifts to the patentee . . .”).

61. “[T]he burden of persuasion is and remains always upon the party asserting invalidity.” *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1358 (Fed. Cir. 1984) (citation and emphasis omitted). “It is not necessary that the court hold a patent valid; it is only necessary that it hold that the patent challenger has failed to carry its burden.” *Ajinomoto Co. v. Archer-Daniels-Midland Co.*, C.A. No. 95-218-SLR, 1996 U.S. Dist. LEXIS 15988, at *20 (D. Del. Oct. 21, 1996), citing *Jones v. Hardy*, 727 F.2d 1524, 1529 n.3 (Fed. Cir. 1984), *aff’d*, 228 F.3d 1338 (Fed. Cir. 2000). “[W]here the challenger fails to identify any persuasive evidence of invalidity, the very existence of the patent satisfies the patentee’s burden on the validity issue.” *Canon Computer Sys., Inc. v. Nu-Kote Int’l, Inc.*, 134 F.3d 1085, 1088 (Fed. Cir. 1998).

62. Although the burden of proof for invalidity is always clear and convincing evidence, the finder of fact may give less weight to prior art references that were previously considered by the PTO. *Sciele Pharma Inc. v. Lupin Ltd.*, 684 F. 3d 1253, 1260-61 (Fed. Cir. 2012) (“[I]t may be harder to meet the clear and convincing burden when the invalidity contention is based upon the same argument on the same reference that the PTO already considered. Importantly, whether a reference was before the PTO goes to the weight of the evidence, and the parties are of course free to, and generally do, make these arguments to the fact finder.”).

b. Prior Art

63. Pre-AIA 35 U.S.C. § 102 defines the scope of prior art for the purposes of anticipation and obviousness in this case. Defendants have the burden under the Federal Rules of Evidence to show by clear and convincing evidence that the documents they intend to assert as prior art are authentic, admissible, and were publicly available before the relevant dates to qualify as prior art under 35 U.S.C. § 102. Fed. R. Evid. 803, 901 and 902. To establish that a document is prior art, it is Defendants’ burden to present sufficient evidence to establish that the document was publicly accessible before the critical date of the patent. *Kyocera Wireless Corp. v. ITC*, 545 F.3d 1340, 1350 (Fed. Cir. 2008); *In re Wyer*, 655 F.2d 221, 227 (C.C.P.A. 1981). “[P]ublic accessibility’ has been called the touchstone in determining whether a reference constitutes a ‘printed publication’ bar under 35

U.S.C. § 102(b).” *SRI Int’l, Inc. v. Internet Sec. Systems, Inc.*, 511 F. 3d 1186, 1194-95 (Fed. Cir. 2008), citing *In re Hall*, 781 F.2d 897, 898-99 (Fed. Cir. 1986). “A given reference is ‘publicly accessible’ upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *Id.*, citing *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006); *see also Kyocera Wireless Corp.*, 545 F.3d at 1350; *In re Lister*, 583 F.3d 1307, 1311-14 (Fed. Cir. 2009).

c. Anticipation

64. “Claimed subject matter is ‘anticipated’ when it is not new; that is, when it was previously known.” *Sanofi-Synthelabo v. Apotex, Inc.*, 550 F.3d 1075, 1085 (Fed. Cir. 2008). Anticipation requires that “every element and limitation of the claim was previously described in a single prior art reference, either expressly or inherently, so as to place a person of ordinary skill in possession of the invention.” *Id.* at 1082. “A patent claim is invalid due to anticipation if, within ‘the four corners of a single, prior art document . . . every element of the claimed invention [is described], either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.’” *Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1346 (Fed.

Cir. 2009), citing *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000).

65. “Because the hallmark of anticipation is prior invention, the prior art reference . . . must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *NetMoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). There also “must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.” *Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991), *overruled in part on other grounds by Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1293 (Fed. Cir. 2009).

d. Obviousness

66. A patent is invalid as obvious “if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103; *see also Wyers v. Master Lock Co.*, 616 F.3d 1231, 1237 (Fed. Cir. 2010). “[O]bviousness is a matter of law based on findings of underlying fact.” *Sanofi-Synthelabo v. Apotex, Inc.*, 550 F.3d 1075, 1085 (Fed. Cir. 2008), *cert. denied*, 130 S. Ct. 493 (2009).

67. To perform this analysis under § 103, “the scope and content of the prior art are [to be] determined; differences between the prior art and the claims at issue are [to be] ascertained; and the level of ordinary skill in the pertinent art resolved.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007), quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966). “Against this background, the obviousness or nonobviousness of the subject matter is determined.” *Id.* “Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Id.* Before finding a patent claim invalid for obviousness, a court must consider all of these factors. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 663 (Fed. Cir. 2000).

68. “[A] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art.” *KSR Int’l Co.*, 550 U.S. at 418; *see also Forest Labs., LLC v. Sigmapharm Labs., LLC*, No. 17-2369, Slip Op. (Fed. Cir. March 14, 2018) (“An invention is not obvious simply because all of the claimed limitations were known in the prior art at the time of the invention.”). Rather, there must be some evidence of a motivation or reason to combine the references. *KSR*, 550 U.S. at 415, 419.

69. The Federal Circuit has recognized that where a problem was not known in the art, the solution to that problem may not be obvious, because

“ordinary artisans would not have thought to try at all because they would not have recognized the problem.” *Leo Pharm. Prods., Ltd. v. Rea*, 726 F.3d 1346, 1357 (Fed. Cir. 2013).

70. Defendants, as the patent challengers, must establish by clear and convincing evidence that the claimed invention would have been *prima facie* obvious. *Kaufman Co. v. Lantech, Inc.*, 807 F.2d 970, 974-75 (Fed. Cir. 1986). Failure to show *prima facie* obviousness means the claims are not invalid for obviousness, ending the inquiry. *Yamanouchi Pharma. Co., Ltd. v. Danbury Pharma., Inc.*, 231 F.3d 1339, 1345 (Fed. Cir. 2000)

71. “Obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.” *Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013); *In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011) (“Care must be taken to avoid hindsight reconstruction by using ‘the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.’”). “[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR Int’l Co.*, 550 U.S. at 416. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be

discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009) (“An inference of nonobviousness is especially strong where the prior art's teachings undermine the very reason being proffered as to why a person of ordinary skill would have combined the known elements.”).

72. “What a prior art reference teaches and whether a skilled artisan would have been motivated to combine references are questions of fact.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1051 (Fed. Cir. 2016), citing *Par Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1196-97 (Fed. Cir. 2014)).

e. Secondary Considerations of Non-Obviousness

73. The patent holder “may rebut a prima facie showing of obviousness with objective indicia of nonobviousness.” *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311 (Fed. Cir. 2006); *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1305 (Fed. Cir. 2010) (“If all of the factual disputes regarding the objective evidence resolve in favor of [plaintiff], it

has presented a strong basis for rebutting the prima facie case [of obviousness].”).

The objective indicia of non-obviousness should be considered to guard against hindsight bias. Such factors include:

(i) copying; (ii) long felt but unresolved need; (iii) failure of others to develop the invention; (iv) licenses showing industry respect for the invention; (v) commercial success; (vi) unexpected results created by the claimed invention; (vii) whether the claimed invention was praised by others in the field; and (viii) skepticism of skilled artisans before the invention.

Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc., 711 F.3d 1348, 1368 (Fed. Cir. 2013); *Cross Med. Prods.*, 424 F.3d at 1322-23; *Ormco*, 463 F.3d at 1311. This list is not exhaustive, however, and may also include additional factors related to obviousness or non-obviousness. *Graham*, 383 U.S. at 17-18. “Objective indicia of nonobviousness must be considered in every case where present.” *Apple*, 839 F.3d at 1048, citing *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012).

74. **Copying:** “[C]opying the claimed invention, rather than one within the public domain, is indicative of non-obviousness.” *Windsurfing Int’l, Inc. v. AMF, Inc.*, 782 F.2d 995, 1000 (Fed. Cir. 1986). “The fact that a competitor copied technology suggests that it would not have been obvious.” *WBIP*, 829 F.3d at 1336; *Texas Instruments, Inc. v. United States Int’l Trade Comm’n*, 988 F.2d 1165, 1178 (Fed. Cir. 1993).

75. **Long Felt But Unresolved Need:** A long felt need for the invention that was not yet fulfilled as of the date of the invention is evidence of non-obviousness when the invention met such a need. *Procter & Gamble Co. v. Teva Pharms. USA, Inc.*, 566 F.3d 989, 998 (Fed. Cir. 2009). “Evidence of a long felt but unresolved need tends to show non-obviousness because it is reasonable to infer that the need would have not persisted had the solution been obvious.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1332 (Fed. Cir. 2016); *see also Leo Pharm. Prods., Ltd. v. Rea*, 726 F.3d 1346, 1359 (Fed. Cir. 2013) (finding that the “length of the intervening time between the publication dates of the prior art and the claimed invention” may support that there was a long-felt need for the claimed invention).

76. **Failure of Others to Develop the Invention:** Evidence showing that others in the field tried and failed to develop inventions similar to the patentee’s can support a finding of non-obviousness. *In re Cyclobenzaprine*, 676 F.3d at 1082. “The purpose of evidence of failure of others is to show indirectly the presence of a significant defect in the prior art, while serving as a simulated laboratory test of the obviousness of the solution to a skilled artisan.” *Id.* (internal quotation marks and citation omitted). “Long-felt need is closely related to the failure of others. Evidence is particularly probative of [non-]obviousness when it demonstrates both that a demand existed for the patented invention, and that others

tried but failed to satisfy that demand.” *Id.* “This is particularly true when the evidence indicates that others found development of the claimed invention difficult and failed to achieve any success.” *In re Cyclobenzaprine*, 676 F.3d at 1081; *see also Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 1354 (Fed. Cir. 2003) (finding “there can be little better evidence negating an expectation of success than actual reports of failure”). “Litigation argument that an innovation is really quite ordinary carries diminished weight when offered by those who had tried and failed to solve the same problem, and then promptly adopted the solution that they are now denigrating.” *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994).

77. **Commercial Success:** “Commercial success is relevant because the law presumes an idea would successfully have been brought to market sooner, in response to market forces, had the idea been obvious to persons skilled in the art.” *Merck & Co. v. Teva Pharma. USA*, 395 F. 3d 1364, 1376 (Fed. Cir. 2005). “It is not necessary, however, that the patented invention be solely responsible for the commercial success, in order for this factor to be given weight appropriate to the evidence, along with other pertinent factors.” *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir. 1991). The Federal Circuit has noted that “if the marketed product embodies the claim features, and is coextensive

with them, then a nexus is presumed and the burden shifts to the party asserting obviousness to present evidence to rebut the presumed nexus. The presumed evidence cannot be rebutted with mere argument; evidence must be put forth.” *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000); *see also J.T. Eaton & Co., Inc. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997) (“When a patentee can demonstrate commercial success, usually shown by significant sales in a relevant market, and that the successful product is the invention disclosed and claimed in the patent, it is presumed that the commercial success is due to the patented invention.”); *Pro-Mold and Tool Co., Inc. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1574 (Fed. Cir. 1996).

78. **Unexpected Results:** A showing of unexpected results can support a conclusion of non-obviousness. *See United States v. Adams*, 383 U.S. 39, 51–52 (1966). In considering unexpected results, courts ask whether “the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or un-expected.” *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995).

f. On Sale Bar

79. Under § 102(b), an invention is not new if “the invention was . . . on sale in this country, more than one year prior to the date of the application for

patent in the United States.” 35 U.S.C. § 102(b) (Pre-AIA). A two-prong test governs the application of the on-sale bar: “First, the product must be the subject of a commercial offer for sale . . . Second, the invention must be ready for patenting.” *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998).

80. With respect to the first prong, an offer for sale under § 102(b) requires a “commercial offer for sale” under applicable contract law, i.e., “the offer must be sufficiently definite that another party could make a binding contract by simple acceptance, assuming consideration.” *Atlanta Attachment Co. v. Leggett & Platt, Inc.*, 516 F.3d 1361, 1365 (Fed. Cir. 2008); *see also Linear Tech. Corp. v. Micrel, Inc.*, 275 F.3d 1040, 1052 (Fed. Cir. 2002) (“General principles of contract law must govern a conclusion that a sale occurred, and under these principles, a completed sale requires an offer, an acceptance, and consideration.”); *Group One Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1048 (Fed. Cir. 2001) (“A commercial sale or offer for sale necessarily involves consideration.”).

81. “It is not a violation of the on-sale bar to make preparations for the sale of a claimed invention—an actual sale or offer to sell must be proved.” *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 830 (Fed. Cir. 1991), citing 35 U.S.C. § 102(b); *see also Medicines Co. v. Hospira, Inc.*, 827 F.3d 1363, 1377 (“It is well-settled that mere preparations for commercial sales are not themselves ‘commercial sales’ or ‘commercial offers for sale’ under the on-sale bar.”). The

Federal Circuit has held “that an inventor that has publicized that a product will soon be placed on sale has not created an offer that another party could make binding by simple acceptance.” *Medicines Co.*, 827 F.3d at 1378, citing *Linear Tech. Corp.*, 275 F.3d at 1050. “To the contrary, such an inventor has told buyers that it cannot have access to the invention yet, regardless of a customer’s interest in buying.” *Id.*

82. With respect to the second prong, an invention is “ready for patenting” when it has been reduced to practice or when the inventor has prepared drawings or other descriptions of the invention that are sufficiently specific to enable persons skilled in the art to practice the invention. *Pfaff*, 525 U.S. at 61-63. “The fact that a concept is eventually shown to be workable does not retrospectively convert the concept into one that was ‘ready for patenting’ at the time of conception. As we have observed, the [Supreme] Court recognized this distinction when it stated in *Pfaff* that the on sale bar does not arise when there is ‘additional development after the offer for sale.’” *Space Systems/Loral, Inc. v. Lockheed Martin Corp.*, 271 F.3d 1076, 1080–81 (Fed. Cir. 2001).

83. Subsequent completion of an invention after the critical date will not relate back to make an offer for sale of an incomplete invention an invalidating sale. *Robotic Vision Systems, Inc. v. View Engineering, Inc.*, 112 F.3d 1163, 1167-68 (Fed. Cir. 1997) (“An offer of sale, to be a bar within the meaning of section

102(b), must be of an invention that is substantially complete at the time of the offer. . . . The on-sale bar was not intended to prevent discussions between potential inventor-suppliers and customers concerning inventions not yet completed.”)

84. Defendants bear the burden of proving that any product allegedly offered for sale before the critical date meets each limitation of the asserted apparatus claims on a claim-by-claim and limitation-by-limitation basis. *Lacks Industries, Inc. v. McKechnie Vehicle Components USA, Inc.*, 2008 WL 4962687, *4 (Fed. Cir. 2008); *see also* 35 U.S.C. § 282(a) (“Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.”).

85. With respect to method claims (i.e., claims 6 and 8-11 of the ’658 patent and claim 21 of the ’662 patent), Defendants must prove by clear and convincing evidence that prior to the critical date, Plaintiffs made a commercial offer to perform the patented method, on a claim-by-claim and limitation-by-limitation basis. *Plumtree Software, Inc. v. Datamize, LLC*, 473 F.3d 1152, 1162-63 (Fed. Cir. 2006) (vacating district court’s grant of summary judgment that the patent was invalid under the on sale bar because there was insufficient proof that the claimed methods were performed before the critical date), citing *Scaltech, Inc.*

v. Retec/Tetra, LLC, 269 F.3d 1321, 1328-29 (Fed. Cir. 2001). Method claims are not sold like a tangible product. To meet the standard under § 102(b), the method itself must be performed prior to the critical date as part of a commercial sale. *See In re Kollar*, 286 F. 3d 1326, 1332 (Fed. Cir. 2002) (“A process, however, is a different kind of invention; it consists of acts, rather than a tangible item. It consists of doing something, and therefore has to be carried out or performed.”). Thus, even the offer to sell the blenders prior to the critical date would not trigger the on sale bar here; Defendants have to prove that Plaintiffs offered to sell a product *made by* the claimed method (e.g., a blended milkshake) or offered to actually perform the claimed method of blending a milkshake as part of a commercial transaction. *Id.*

86. Oral testimony that an invention was on sale more than one year before the filing of a patent must be sufficiently corroborated under a “rule of reason” standard. *Lacks Indus., Inc. v. McKechnie Vehicle Components USA, Inc.*, 322 F.3d 1335, 1349 (Fed. Cir. 2003); *Woodland Trust*, 148 F.3d at 1371. Oral testimony by interested parties must be corroborated by documentary evidence. *Lacks*, 322 F.3d at 1350. The “on sale” bar is measured by the time the public came into possession of the invention. *Continental Can Co. USA, Inc. v. Continental PET Tech., Inc.*, 948 F.2d 1264, 1270 (Fed. Cir. 1991).

g. Inventorship

87. “Patent issuance creates a presumption that the named inventors are the true and only inventors.” *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998); *see also Trovan, Ltd. v. Sokymat SA, Irori*, 299 F.3d 1292, 1301 (Fed. Cir. 2002) (“[B]ecause a patent is presumed valid [under] 35 U.S.C. § 282, there follows a presumption that the named inventors on a patent are the true and only inventors.”); *Hess v. Adv. Cardiovascular Sys., Inc.*, 106 F.3d 976, 980 (Fed. Cir. 1997). A party challenging inventorship “must meet the heavy burden of proving its case by clear and convincing evidence.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1358 (Fed. Cir. 2004); *see also General Elec. Co. v. Wilkins*, 750 F.3d 1324, 1329 (Fed. Cir. 2014) (“Because the issuance of a patent creates a presumption that the named inventors are the true and only inventors, the burden of showing misjoinder or nonjoinder of inventors is a heavy one and must be proved by clear and convincing evidence[.]”); *In re Etter*, 756 F.2d 852, 856 (Fed. Cir. 1985). That clear and convincing evidence must be corroborated. *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998) (“An assertion of incorrect inventorship must be based on facts proved by clear and convincing, corroborated evidence.”).

88. “Inventorship is a question of law . . . based on underlying facts.” *Univ. of Pittsburgh of the Commonwealth Sys. of Higher Educ. v. Hedrick*, 573 F.3d 1290, 1297 (Fed. Cir. 2009).

89. “The ‘inventor,’ in patent law, is the person or persons who conceived the patented invention.” *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). Thus, in order to be considered an inventor, one must contribute to the **conception** of the invention. *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1227-28 (Fed. Cir. 1994). “[T]he test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention.” *Id.* at 1228. A joint inventor’s contribution to the conception of an invention must not be insignificant in quality, when “measured against the dimension of the full invention.” *Eli Lilly & Co.*, 376 F.3d at 1359. “The primary meaning of the word ‘invention’ in the Patent Act unquestionably refers to the inventor’s conception rather than to a physical embodiment of that idea.” *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 60 (1998).

90. One who merely suggests an idea cannot qualify as a joint inventor. *Garrett Corp. v. United States*, 422 F.2d 874, 881 (Fed. Ct. Cl. 1970).

91. One who simply assists the actual inventor after conception cannot qualify as a joint inventor. *Eli Lilly & Co.*, 376 F.3d at 1359; *see also Hoop v. Hoop*, 279 F.3d 1004, 1007 (Fed. Cir. 2002) (“One may not qualify as a joint

inventor, or as here, a new inventor, by ‘merely assisting the actual inventor after conception of the claimed invention.’” (quoting *Ethicon*, 135 F.3d at 1460)); *C.R. Bard*, 157 F.3d at 1352 (“[O]thers may provide services in perfecting the invention conceived by another without becoming an ‘inventor’ by operation of law” (citing *Burroughs Wellcome Co.*, 40 F.3d at 1227-28)). “[A]n inventor may use the services, ideas, and aid of others in the process of perfecting his invention without losing his right to a patent.” *Id.*, quoting *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624 (Fed. Cir. 1985).

92. The Federal Circuit has instructed that “[w]hen a party asserts invalidity under § 102(f) due to nonjoinder, a district court should first determine whether there exists clear and convincing proof that the alleged unnamed inventor was in fact a co-inventor.’ Then, ‘[u]pon such a finding of incorrect inventorship, a patentee may invoke section 256 to save the patent from invalidity.’” *Checkpoint Systems, Inc. v. All-Tag Sec. SA*, 412 F. 3d 1331, 1340 (Fed. Cir. 2005), quoting *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1350 (Fed. Cir. 1998). “To invalidate a patent based on incorrect inventorship it must be shown not only that the inventorship was incorrect, but that correction is unavailable under section 256.” *C.R. Bard*, 157 F.3d at 1353; *see also Pannu*, 155 F.3d at 1350 (if the alleged omitted inventor is determined to be an inventor the patentee “must be given an opportunity to invoke the benefits of section 256”).

93. Section 256 of Title 35 of the United States Code states:

(a) Correction.—

Whenever through error a person is named in an issued patent as the inventor, or through error an inventor is not named in an issued patent, the Director may, on application of all the parties and assignees, with proof of the facts and such other requirements as may be imposed, issue a certificate correcting such error.

(b) Patent Valid if Error Corrected.—

The error of omitting inventors or naming persons who are not inventors shall not invalidate the patent in which such error occurred if it can be corrected as provided in this section. The court before which such matter is called in question may order correction of the patent on notice and hearing of all parties concerned and the Director shall issue a certificate accordingly.

94. “The purpose of § 256 was to provide a remedy for a bona fide mistake in inventorship.” *Stark v. Advanced Magnetics, Inc.*, 29 F.3d 1570, 1573 (Fed. Cir. 1994), citing S.Rep. No. 1979, 82nd Cong., 2d Sess. 7 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2401.¹

¹ Neither 35 U.S.C. § 256 nor 37 C.F.R. § 1.324 create any “presumption of laches” that would prevent correction of the patents under § 256 where the inventorship challenge is made by an accused infringer. *See Stark v. Advanced Magnetics, Inc.*, 29 F.3d 1570, 1575 (Fed. Cir. 1994). Where, however, a party alleges that he should have been named as an inventor, but delays filing his claim for more than six years, a rebuttable presumption of laches may apply. *See Pei-Herng Hor v. Ching-Wu Chu*, 699 F.3d 1331, 1334 (Fed. Cir. 2012).

95. “An error in determining inventorship is not by itself inequitable conduct.” *Pro-Mold and Tool Co., Inc. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1576 (Fed. Cir. 1996). “When an alleged omitted co-inventor does not claim to be such, it can hardly be inequitable conduct not to identify that person to the PTO as an inventor.” *Id.*

h. Definiteness Under § 112

96. Section 112 of Title 35 of the United States Code requires that “[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112, ¶ 2. This provision strikes a “delicate balance” which recognizes that the definiteness requirement must tolerate “[s]ome modicum of uncertainty” as “the price of ensuring the appropriate incentives for innovation.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2128, 189 L. Ed. 2d 37 (2014), quoting *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 731-32 (2002) (internal quotation marks omitted).

97. Accordingly, a party seeking to invalidate a patent claim based on indefiniteness under 35 U.S.C. § 112, ¶ 2 must prove by clear and convincing evidence that a patent’s “claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Cox Commc’ns, Inc. v. Sprint*

Comm’n Co. LP, 838 F.3d 1224, 1228-29 (Fed. Cir. 2016), cert. denied, 137 S. Ct. 2267 (2017), quoting *Nautilus*, 134 S. Ct. at 2124. It is the “claims, not particular claim terms” that are pertinent to “the dispositive question in an indefiniteness inquiry.” *Cox*, 838 F.3d at 1231-32.

98. “When a ‘word of degree’ is used [in a claim], the trial court must determine whether the patent provides ‘some standard for measuring that degree.’” *Advanced Aerospace Techs., Inc. v. United States*, 124 Fed. Cl. 282, 298 (Fed. Cl. 2015), citing *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015); *see also Interval Licensing*, 766 F.3d at 1370 (“Claim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention.”). Where the purpose of the invention, as described in the specification, provides a person of skill in the art with reasonable certainty as to the meaning of claim term in the context of the invention, the term is not indefinite. *See, e.g., Advanced Aerospace Techs., Inc.*, 124 Fed. Cl. at 298 (finding the claim term “sufficient amount” was not indefinite because the patent provided a “‘standard for measuring’ the term ‘sufficient amount’ with reasonable certainty, as it describes the amount of braking force necessary to effectuate the ‘substantial arrestment’ of a line in the hook of a flying object.”).

99. Claim elements may be “expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof” and “such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112. “Whether the written description adequately sets forth structure corresponding to the claimed function must be considered from the perspective of a person skilled in the art.” *Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1338 (Fed. Cir. 2008); *see also Intellectual Property Development, Inc. v. UA-Columbia Cablevision of Westchester, Inc.*, 336 F.3d 1308, 1319 (Fed. Cir. 2003) (“[A] challenge to a claim containing a means-plus-function limitation as lacking structural support requires a finding, by clear and convincing evidence, that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function.”).

100. Whether a claim is indefinite is a question of law to be assessed as of the filing date. *Howmedica Osteonics Corp. v. Tranquil Prospects, Ltd.*, 401 F.3d 1367, 1370, 1372 (Fed. Cir. 2005).

i. Priority

101. An application may claim the benefit of the filing date of an earlier application if the earlier application complies with the written description requirement of 35 U.S.C. § 112. *See* 35 U.S.C. § 120; *Martek*, 579 F.3d at 1369.

“The test for sufficiency of support in a parent application is whether the disclosure of the application relied upon reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter.” *Id.* (internal quotation marks and citations omitted).

102. If the party challenging validity comes forward with clear and convincing evidence of invalidating prior art that puts at issue the priority date of any claim of a patent, the burden shifts to the patentee “to come forward with evidence to prove entitlement to claim priority to a filing date that predates the filing date of the patent.” *Fairchild Semiconductor Corp v. Power Integrations*, 100 F. Supp. 3d 357, 368 (D. Del. 2015), citing *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305-06 (Fed. Cir. 2008). To meet this burden, the patentee must demonstrate that “the disclosure of the earlier application provides support for the claims of the later application, as required by 35 U.S.C. § 112” *PowerOasis*, 522 F.3d at 1306, citing *In re Chu*, 66 F.3d 292, 297 (Fed. Cir. 1995).

103. A “prior application need not contain precisely the same words as are found in the asserted claims,” but “the prior application must indicate to a person skilled in the art that the inventor was ‘in possession’ of the invention as later claimed.” *Id.* (citations omitted). “[I]t is unnecessary to spell out every detail of the invention in the specification; only enough must be included to convince a person of skill in the art that the inventor possessed the invention.” *LizardTech*,

Inc. v. Earth Resource Mapping, Inc., 424 F.3d 1336, 1345 (Fed. Cir. 2005); *see also Eiselstein v. Frank*, 52 F.3d 1035, 1038 (Fed. Cir. 1995) (“[T]he prior application need not describe the claimed subject matter in exactly the same terms as used in the claims; it must simply indicate to persons skilled in the art that as of the earlier date the applicant had invented what is now claimed.”). All that is required is “that the [earlier] written description actually or inherently disclose the claim element.” *PowerOasis*, 522 F.3d at 1306.

PRETRIAL ORDER EXHIBIT 5

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41-CFC
CONSOLIDATED

Exhibit 5

Defendants' Statement of Issues of Law Remaining to be Litigated

Defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively, “Defendants”) respectfully submit the following Statement of Issues of Law That Remain To Be Litigated (“Statement”) based on Defendants’ current understanding of the claims and counterclaims defenses of Plaintiffs f’real Foods, LLC (“f’real”) and Rich Products Corporation (“Rich”) (collectively, “Plaintiffs”). To the extent Exhibit 3 contains issues of law, those issues are incorporated herein by reference. Likewise, to the extent any issue identified in this Statement is more appropriately considered an issue of fact, Defendants incorporate such issue by reference into Exhibit 3. By including a fact herein, Defendants do not assume the burden of proof or production with regard to that fact.

Defendants reserve the right to modify or supplement this Statement to the extent necessary to fairly reflect the Court’s rulings on any pending motions, the Court’s resolution of any evidentiary issues, various other subsequent orders of the Court, agreements of the parties, and/or other developments in the case. In addition, to the extent that Plaintiffs intend or attempt to introduce different or additional legal arguments to those identified below, Defendants reserve their right to contest those legal arguments and to present rebuttal evidence in response to those arguments without being bound by this Statement.

I. Infringement

A. Issues

1. U.S. Patent No. 5,803,377 (“the ’377 Patent”)

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendants have literally directly infringed claims 1, 11, 18, 19, and 27 of the ’377 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused product.
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendants have directly infringed under the doctrine of equivalents claims 1, 11, 18, 19, and 27 of the ’377 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused product.¹

2. U.S. Patent No. 7,144,150 (“the ’150 Patent”)

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hamilton Beach has literally directly infringed claims 15, 20, and 22 of the ’150 Patent by making, using, offering

¹ Defendants object to Plaintiffs’ attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the ’377 Patent. As discussed in Defendants’ *Motion in Limine*, Plaintiffs’ expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

to sell, selling, or importing into the United States the MIC2000, BIC2000, and BIC3000-DQ accused products.

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hershey Creamery has literally directly infringed claims 15, 20, and 22 of the '150 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused products.
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hamilton Beach has directly infringed under the doctrine of equivalents claims 15, 20, and 22 of the '150 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000, BIC2000, and BIC3000-DQ accused products.²
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hershey Creamery has directly infringed under the doctrine of equivalents claims 15, 20, and 22 of the '150 Patent by

² Defendants object to Plaintiffs' attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the '150 Patent. As discussed in Defendants' *Motion in Limine*, Plaintiffs' expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

making, using, offering to sell, selling, or importing into the United States the MIC2000 accused products.³

3. U.S. Patent No. 7,520,658 (“the ’658 Patent”)

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hamilton Beach has literally directly infringed claims 1, 5, 6, and 8-11 of the ’658 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000, IMI2000, BIC2000, and BIC3000-DQ accused products.
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hershey Creamery has literally directly infringed claims 1, 5, 6, and 8-11 of the ’658 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused products.
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hamilton Beach has directly infringed under the doctrine of equivalents claims 1, 5, 6, and 8-11 of the ’658 Patent by making, using, offering to sell, selling, or importing into the United

³ Defendants object to Plaintiffs’ attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the ’150 Patent. As discussed in Defendants’ *Motion in Limine*, Plaintiffs’ expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

States the MIC2000, IMI2000, BIC2000, and BIC3000-DQ accused products.⁴

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hershey Creamery has directly infringed under the doctrine of equivalents claims 1, 5, 6, and 8-11 of the '658 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused products.⁵
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendants have infringed claims 6 and 8-11 of the '658 Patent by inducing acts that constitu⁶ted infringement of that patent with knowledge of that patent.

⁴ Defendants object to Plaintiffs' attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the '658 Patent. As discussed in Defendants' *Motion in Limine*, Plaintiffs' expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

⁵ Defendants object to Plaintiffs' attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the '658 Patent. As discussed in Defendants' *Motion in Limine*, Plaintiffs' expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

⁶ Plaintiffs must also prove by a preponderance of the evidence that there is underlying direct infringement, including joint infringement by consumers and retailers when consumers use the accused MIC2000 in Hershey's Shake Shop Express program.

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendants contributed to another's infringement of the asserted claims of the '658 Patent.⁷

4. U.S. Patent No. 7,520,662 (“the '662 Patent”)

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hamilton Beach has literally directly infringed claim 21 of the '662 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000, IMI2000, BIC2000, and BIC3000-DQ accused products.
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hershey Creamery has literally directly infringed claim 21 of the '662 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused products.
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hamilton Beach has directly infringed under the doctrine of equivalents claim 21 of the '662 Patent by making,

⁷ Plaintiffs must also prove by a preponderance of the evidence that there is underlying direct infringement, including joint infringement by consumers and retailers when consumers use the accused MIC2000 in Hershey's Shake Shop Express program.

using, offering to sell, selling, or importing into the United States the MIC2000, IMI2000, BIC2000, and BIC3000-DQ accused products.⁸

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendant Hershey Creamery has directly infringed under the doctrine of equivalents claim 21 of the '662 Patent by making, using, offering to sell, selling, or importing into the United States the MIC2000 accused products.⁹
- Whether Plaintiffs have proven by a preponderance of the evidence that Defendants have infringed claim 21 of the '662 Patent by inducing acts that constituted infringement of that patent with knowledge of that patent.¹⁰

⁸ Defendants object to Plaintiffs' attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the '662 Patent. As discussed in Defendants' *Motion in Limine*, Plaintiffs' expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

⁹ Defendants object to Plaintiffs' attempt to include a doctrine of equivalents theory in its statement of issues to be decided for the '662 Patent. As discussed in Defendants' *Motion in Limine*, Plaintiffs' expert report does not adequately support this theory, and prosecution history estoppel prevents Plaintiffs from asserting doctrine of equivalents.

¹⁰ Plaintiffs must also prove by a preponderance of the evidence that there is underlying direct infringement, including joint infringement by consumers and retailers when consumers use the accused MIC2000 in Hershey's Shake Shop Express program.

- Whether Plaintiffs have proven by a preponderance of the evidence that Defendants contributed to another's infringement of claim 21 of the '662 Patent.¹¹

B. Legal Authority

1. Infringement Generally

Plaintiffs bear the burden of proving by a preponderance of evidence whether Defendants have infringed. *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001); *Braun Inc. v. Dynamics Corp. of Am.*, 975 F.2d 815, 819 (Fed. Cir. 1992). A party infringes a patent when it, without authority, “makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent.” 35 U.S.C. § 271(a).

Determining infringement of a patent claim requires two steps: first, interpreting the language of the claim to determine its meaning and scope, and second, comparing the construed claim to the accused device to determine whether all of the claim elements or their equivalents are present. *See Moore U.S.A., Inc. v. Standard Register Co.*, 229 F.3d 1091, 1105 (Fed. Cir. 2000); *Rexnord Corp. v.*

¹¹ Plaintiffs must also prove by a preponderance of the evidence that there is underlying direct infringement, including joint infringement by consumers and retailers when consumers use the accused MIC2000 in Hershey's Shake Shop Express program.

Laitram Corp., 274 F.3d 1336, 1341 (Fed. Cir. 2001). Claim construction is a matter of law to be decided by the Court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979–81 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). Whether the claims, as construed by the Court, are infringed is a question of fact to be determined by the jury. *Ferguson Beauregard/Logic Controls, Div. of Dover Res., Inc. v. Mega Sys., LLC*, 350 F.3d 1327, 1338 (Fed. Cir. 2003). “To prove [patent] infringement, the patentee must show that the accused device meets each claim limitation, either literally or under the doctrine of equivalents.” *PSC Comput. Prods., Inc. v. Foxconn Int’l, Inc.*, 355 F.3d 1353, 1357 (Fed. Cir. 2004).

2. Direct Infringement – Literal

“To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly.” *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir. 1995). For method claims, direct infringement occurs only when an accused method or product performs all of the steps of the claimed process. *See Joy Techs., Inc. v. Flakt, Inc.*, 6 F.3d 770, 773 (Fed. Cir. 1993) (“[A] method or process claim is directly infringed only when the process is performed.”); *Canton Bio-Med., Inc. v. Integrated Liner Techs., Inc.*, 216 F.3d 1367, 1370 (Fed. Cir. 2000) (“Infringement of process inventions is subject to the ‘all-elements rule’ whereby each of the claimed steps of a patented process must be performed in an infringing process . . .”). Infringement of a method claim requires a specific action.

Kaneka Corp. v. Xiamen Kingdomway Grp. Co., 790 F.3d 1298, 1308 (Fed. Cir. 2015) (“Here, because the claims affirmatively recite the step of ‘oxidizing,’ ‘oxidizing’ cannot be interpreted as doing nothing, or to simply allow oxidation to occur on its own.”). If an accused infringer does not infringe an independent claim, then the claims that depend on it are also not infringed as a matter of law. *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007).

In the situation where a party does not perform or use each and every step or element of the patent claim, to prove direct infringement the patentee must allege a joint infringer theory in which “the acts of one are attributable to the other such that a single entity is responsible for the infringement.” *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015). To show that the performance of method steps is attributable to a single entity, the patentee must prove that a party (1) directed or controlled a third party to carry out or use certain steps or elements of the patented method or product, or (2) the party and the third party constitute “a joint enterprise.” *See, e.g., BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378–82 (Fed. Cir. 2007); *Akamai Techs.*, 797 F.3d at 1022–23. “Direction or control” arises when the third party performs the steps of the patented process or uses the elements of the patented product by virtue of a contractual obligation or other relationship that gives rise to vicarious liability. *See BMC Res.*, 498 F.3d at 1378–82. Liability “can also be found when an alleged infringer conditions

participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance.” *Akamai Techs.*, 797 F.3d at 1023. “Whether a single actor directed or controlled the acts of one or more third parties is a question of fact” *Id.* at 1023.

3. Direct Infringement – Doctrine of Equivalents

Infringement under the doctrine of equivalents is generally a question of fact. *Stryker Corp. v. Davol Inc.*, 234 F.3d 1252, 1258 (Fed. Cir. 2000). The jury must determine whether the differences between the accused products and the claim elements are insubstantial. *Warner-Jenkinson Co. v. Hilton-Davis Chem. Co.*, 520 U.S. 17, 38–39 (1997).

Evidence of infringement under the doctrine of equivalents must be presented on a limitation-by-limitation basis, and not based on the invention as a whole. *Motionless Keyboard Co. v. Microsoft Corp.*, 486 F.3d 1376, 1383 (Fed. Cir. 2007); *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1358 (Fed. Cir. 2005) (citing *Warner-Jenkinson*, 520 U.S. at 29). Thus, infringement under the doctrine of equivalents requires the patentee to show that for every element of the claim that is not literally present in the accused method or product, the accused method or product contains a substitute element that is only an insubstantial difference from the claimed element. *See AquaTex Indus., Inc. v. Techniche Sols.*, 479 F.3d 1320, 1326 (Fed. Cir. 2007). One test often applied by courts to evaluate whether a

difference is insubstantial is whether the element in the accused product performs the substantially same function in substantially the same way with substantially the same result as the corresponding claim limitation. *Id.*

However, the patentee may not use the doctrine of equivalents to vitiate a claim limitation entirely. *See Warner-Jenkinson*, 520 U.S. at 39 n.8; *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1323 (Fed. Cir. 2009). Whether a theory of equivalence would vitiate a claim limitation entirely is a legal question for the court to decide. *Id.*

4. Prosecution History Estoppel/Disclaimer

The doctrine of prosecution history estoppel prevents a patentee from using the doctrine of equivalents to recapture subject matter that was relinquished during prosecution of the patent. *Id.*; *Abbott Labs. v. Dey, L P.*, 287 F.3d 1097, 1103–04 (Fed. Cir. 2002). Although the defense of prosecution history estoppel involves underlying factual issues that may be submitted to the jury, it is ultimately a legal question for the court to decide. *DePuy Spine*, 567 F.3d at 1323-1324.

When “the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 733–34 (2002). A narrowing

amendment that adds an additional claim limitation to a patent claim creates a presumptive surrender of equivalents. *Honeywell Int’l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1141 (Fed. Cir. 2004) (en banc). The burden is on the patentee to establish that the reason for the amendment was not related to patentability. *Festo*, 535 U.S. at 739–40 (citing *Warner-Jenkinson*, 520 U.S. at 33). Once the presumption of estoppel applies, the presumption of surrender may be rebutted only if the patentee can demonstrate that: (1) the alleged equivalent would have been unforeseeable at the time the narrowing amendment was made; (2) the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent at issue; or (3) there was some other reason suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent. *Honeywell*, 370 F.3d at 1140, 1144.

A patentee may also be barred from relying on the doctrine of equivalents if, during prosecution, the patentee made arguments that effectively narrowed the scope of the patent claims. “[A]rguments made during prosecution without amendments to claim language—if sufficient to evince a clear and unmistakable surrender of subject matter—may estop an applicant from recapturing that surrendered matter under the doctrine of equivalents.” *Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 828 n.3 (Fed. Cir. 1999); *see also Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d 1571, 1578 (Fed. Cir. 1997) (“Arguments and

amendments made to secure allowance of a claim, especially those distinguishing prior art, presumably give rise to prosecution history estoppel.”); *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 951-52 (Fed. Cir. 1993) (“The essence of prosecution history estoppel is that a patentee should not be able to obtain, through the doctrine of equivalents, coverage of subject matter that was relinquished during prosecution to procure issuance of the patent.”).

Under the “dedication-disclosure” doctrine, a patentee is also precluded from asserting infringement under the doctrine of equivalents for any subject matter that is disclosed but not claimed. *See Johnson & Johnston Assocs. v. R.E. Serv.*, 285 F.3d 1046, 1054-55 (Fed. Cir. 2002) (en banc) (“Having disclosed without claiming the steel substrates, Johnston cannot now invoke the doctrine of equivalents to extend its aluminum limitation to encompass steel. Thus, Johnston cannot assert the doctrine of equivalents to cover the disclosed but unclaimed steel substrate.”). Disclosing but then declining to claim subject matter dedicates that unclaimed subject matter to the public. *Id.* As a result, the unclaimed subject matter cannot be recaptured by applying the doctrine of equivalents. *Id.*

Moreover, a patentee may not assert infringement over subject matter disclaimed during prosecution of the patent. *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995). The doctrine of prosecution disclaimer attaches where an applicant, whether by amendment or by argument, “unequivocally

disavowed a certain meaning to obtain his patent.” *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003). An argument made to an examiner constitutes a disclaimer if it is “clear and unmistakable.” *Purdue Pharma L.P. v. Endo Pharms., Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006).

5. Indirect Infringement – Inducement

Plaintiffs bear the burden to prove indirect infringement by establishing that the defendants contributed to infringement or induced infringement. *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004).

Inducement is a specific-intent tort. *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1305 (Fed. Cir. 2006). To establish liability under 35 U.S.C. § 271(b) for inducement, a patentee must prove by a preponderance of the evidence that “once the defendants knew of the patent, they actively and knowingly aided and abetted another’s direct infringement.” *Id.* (citation and internal quotations omitted); *ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1312 (Fed. Cir. 2007); *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766 (2011).

Knowledge of the existence of the patent that is alleged to be infringed and knowledge of that the induced acts constitute patent infringement are required to prove inducement. *Global-Tech Appliances, Inc.*, 563 U.S. at 766. However, mere “knowledge of the acts alleged to constitute infringement” or of the possibility of

infringement are insufficient. *DSU Med. Corp.*, 471 F.3d at 1305; *Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1363–64 (Fed. Cir. 2003).

The patent holder must also prove that direct infringement by a third party has occurred in order to establish a claim for indirect infringement. *See Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1033 (Fed. Cir. 2002); *see also Dynacore*, 363 F.3d at 1272 (“Indirect infringement, whether inducement to infringe or contributory infringement, can only arise in the presence of direct infringement, though the direct infringer is typically someone other than the defendant accused of indirect infringement.”); *Joy Techs.*, 6 F.3d at 774 (“Liability for either active inducement of infringement or for contributory infringement is dependent upon the existence of direct infringement.”).

6. Indirect Infringement – Contributory Infringement

A party is liable for contributory infringement if it offers for sale, sells, or imports a component of a patented invention that constitutes a “material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use.” 35 U.S.C. § 271(c). The patentee must show that the alleged contributory infringer had knowledge that “the combination for which his components were especially made was both patented and infringing.” *Preemption Devices, Inc. v. Minn. Min. & Mfg. Co.*, 803 F.2d 1170, 1174 (Fed. Cir.

1986) (citing *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 488-91 (1964)). It must also be shown that the accused component “is not a staple article suitable for substantial noninfringing use.” *Id.* “[N]on-infringing uses are substantial when they are not unusual, farfetched, illusory, impractical, occasional, aberrant, or experimental.” *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1327 (Fed. Cir. 2009). “Contributory infringement imposes liability on one who embodies in a non-staple device the heart of a patented process and supplies the device to others to complete the process and appropriate the benefit of the patented invention.” *Id.* (citing *Ricoh Co. v. Quanta Comput., Inc.*, 550 F.3d 1325, 1337 (Fed. Cir. 2008)). However, for liability under Section 271(c) to attach, the patentee must identify a sale or offer for sale of the accused component or device; a patentee cannot predicate allegations of contributory infringement upon the defendant’s provision of a service. *See PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1357 (Fed. Cir. 2007) (finding that “none of [the activities governed by 35 U.S.C. § 271(c)] refer to the provision of a service”); *see also Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1363-64 (Fed. Cir. 2017), *pet. for cert. filed*, 86 U.S.L.W. 3379 (U.S. Jan. 16, 2018) (No. 17-997). Finally, like inducement, there must be actual direct infringement by someone other than the party accused of contributory infringement. *Dynacore*, 363 F.3d at 1272; *Joy Techs.*, 6 F.3d at 774.

II. Invalidity

A. Issues

1. U.S. Patent No. 5,803,377 (“the ’377 Patent”)

- Whether the references asserted against the ’377 Patent are “prior art” under 35 U.S.C. § 102.
- Whether claims 1, 11, 18, 19, and 27 of the ’377 Patent are invalid as obvious over one or more prior art references, either alone or in combination.
- Whether claims 1, 11, 18, 19, and 27 of the ’377 Patent are invalid as indefinite under 35 U.S.C. § 112.

2. U.S. Patent No. 7,144,150 (“the ’150 Patent”)

- Whether the references asserted against the ’150 Patent are “prior art” under 35 U.S.C. § 102.
- Whether claims 15, 20, and 22 are invalid as anticipated under 35 U.S.C. § 102.
- Whether claims 15, 20, and 22 of the ’150 Patent are invalid as obvious over one or more prior art references, either alone or in combination.
- Whether claims 15, 20, and 22 of the ’150 Patent are invalid due to nonjoinder of inventorship under 35 U.S.C. § 102.

- Whether claims 15, 20, and 22 of the '150 Patent are invalid due to the on-sale bar under 35 U.S.C. § 102.
- Whether claim 22 of the '150 Patent is invalid as indefinite under 35 U.S.C. § 112.

3. U.S. Patent No. 7,520,658 (“the '658 Patent”)

- Whether the references asserted against the '658 Patent are “prior art” under 35 U.S.C. § 102.
- Whether claims 1, 5, 6, 8, and 9 of the '658 Patent are invalid as anticipated under 35 U.S.C. § 102.
- Whether claims 1, 5, 6, and 8-11 of the '658 Patent are invalid as obvious over one or more prior art references, either alone or in combination.
- Whether claims 1, 5, 6, and 8-11 of the '658 Patent are invalid due to nonjoinder of inventorship under 35 U.S.C. § 102.
- Whether claims 1, 5, 6, and 8-11 of the '658 Patent are invalid due to the on-sale bar under 35 U.S.C. § 102.
- Whether claims 1, 5, 6, and 8-11 of the '658 Patent are invalid as indefinite under 35 U.S.C. § 112.

4. U.S. Patent No. 7,520,662 (“the ’662 Patent”)

- Whether the references asserted against the ’662 Patent are “prior art” under 35 U.S.C. § 102.
- Whether claim 21 of the ’662 Patent is invalid as obvious over one or more prior art references, either alone or in combination.
- Whether claim 21 of the ’662 Patent is invalid due to nonjoinder of inventorship under 35 U.S.C. § 102.
- Whether claim 21 of the ’662 Patent is invalid due to the on-sale bar under 35 U.S.C. § 102.
- Whether claim 21 of the ’662 Patent is invalid as indefinite under 35 U.S.C. § 112.

B. Legal Authority

1. Burden of Proof

Section 282 of the Patent Act states that patents are presumed valid; therefore, an invalidity defense must be proven by clear-and-convincing evidence. 35 U.S.C. § 282(a); *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 114 (2011). The presumption of validity and the clear-and-convincing burden of proof are “static and in reality different expressions of the same thing—a single hurdle to be cleared.” *Chiron Corp. v. Genetech, Inc.*, 363 F.3d 1247, 1258 (Fed. Cir. 2004) (internal quotation marks omitted). Thus, the presumption of validity “does not constitute

‘evidence’ to be weighed against the challenger’s evidence.” *Id.* at 1258-59 (citation and internal quotation marks omitted).

While § 282 requires clear-and-convincing evidence, “the challenger’s burden to persuade the jury of its invalidity defense by clear and convincing evidence may be easier to sustain” when a party relies on prior art not before the Patent Office during prosecution. *Microsoft*, 564 U.S. at 111. The Supreme Court has recognized that “if the PTO did not have all material facts before it, its considered judgment may lose significant force.” *Id.*

Moreover, expert testimony is not necessary for a patent-in-suit or prior art references that are easily understandable. *Sundance Inc. v Demonte Fabricating Ltd.*, 550 F.3d 1356, 1365 (Fed. Cir. 2008); *Union Carbide v. Am. Can Co.*, 724 F.2d 1567, 1573 (Fed. Cir. 1984) (affirming summary judgment of invalidity).

2. Prior Art

Section 102 of the Patent Act (pre-AIA) provides, in relevant part:

A person shall be entitled to a patent unless —

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States...

35 U.S.C. § 102(a), (b). Whether an allegedly invalidating reference qualifies as prior art is “a legal conclusion based on underlying factual determinations.” *Cooper Cameron Corp. v. Kvaerner Oilfield Prods., Inc.*, 291 F.3d 1317, 1321 (Fed. Cir. 2002). Under the pre-AIA version of Section 102, if the subject matter disclosed by the asserted claims was patented or described in a printed publication “before the invention thereof” in the United States or in a foreign country, the asserted patent is invalid. 35 U.S.C. § 102(a). Under section (b), if the invention was patented or described in a printed publication in any country or was in public use or on sale in the United States more than one year of the date of the application for the asserted patent, the asserted patent is invalid. 35 U.S.C. § 102(b). The “date of invention” under section (a) and the “critical date” under section (b) are currently in dispute.

For purposes of 35 U.S.C § 102(a), the challenger bears the burden of persuasion to show that a particular reference is prior art by clear-and-convincing evidence, and the patentee has the burden of production to demonstrate an earlier “invention date” based on the alleged date of conception, including producing adequate corroboration of such date. *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 967 (Fed. Cir. 2014) (internal citations omitted). The date of invention is a legal conclusion based on underlying factual findings. *Id.* Conception “requires a definite and permanent idea of an operative invention, including every feature of the subject matter sought to be patented.” *In re VerHoef*, 888 F.3d 1362, 1366 (Fed. Cir. 2018),

as amended (May 7, 2018). “An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan.” *Id.* (citation and internal quotation marks omitted).

For purposes of 35 U.S.C § 102(b), the “critical date” is the date that is one year before the filing of the earliest effective filing date, which is the date of the earliest patent application that fully supports the claims of the asserted patent. *See PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306 (Fed. Cir. 2008) (“‘It is elementary patent law that a patent application is entitled to the benefit of the filing date of an earlier filed application only if the disclosure of the earlier application provides support for the claims of the later application, as required by 35 U.S.C. § 112.’”) (citation and internal quotation marks omitted).

3. On-Sale Bar

The on-sale bar applies when two conditions are satisfied before the critical date: “[f]irst, the product must be the subject of a commercial offer for sale” and “[s]econd, the invention must be ready for patenting.” *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). “An actual sale is not required for the activity to be an invalidating commercial offer for sale.” *Hamilton Beach Brands, Inc. v. Sunbeam Prods., Inc.*, 726 F.3d 1370, 1374 (Fed. Cir. 2013). An invention is “ready for patenting” by proof of “reduction to practice before the critical date” or by proof that “prior to the critical date the inventor had prepared drawings or other descriptions of

the invention that were sufficiently specific to enable a person skilled in the art to practice the invention.” *Pfaff*, 525 U.S. at 67-68. As long as an offered product embodies the limitations of the asserted claims, “sales relating to its use can constitute an invalidating commercial sale.” *In re Cygnus Telecommunications Tech., LLC, Patent Litig.*, 536 F.3d 1343, 1355 (Fed. Cir. 2008). With respect to method claims, the Federal Circuit has recognized that offering to perform a claimed method triggers the on-sale bar when the patent owner makes “a commercial offer to perform the patented method” before the critical date, “even if the performance itself occurred after the critical date.” *Plumtree Software, Inc. v. Datamize, LLC*, 473 F.3d 1152, 1162-63 (Fed. Cir. 2006) (citing *Scaltech, Inc. v. Retec/Tetra, LLC*, 269 F.3d 1321, 1328-29 (Fed. Cir. 2001)).

4. Anticipation

A patent claim is invalid as anticipated (or not novel) under 35 U.S.C. § 102 if a single “prior art reference disclose[s] every limitation of the claimed invention, either explicitly or inherently.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1381 (Fed. Cir. 2007); *Hakim v. Cannon Avent Grp., PLC*, 479 F.3d 1313, 1319 (Fed. Cir. 2007). “The fact that a characteristic is a necessary feature or result of a prior-art embodiment (that is itself sufficiently described and enabled) is enough for inherent anticipation, even if that fact was unknown at the time of the prior invention.” *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1321 (Fed. Cir. 2004).

Although invalidity is a question of law, anticipation is a question of fact. *Liebel-Flarsheim*, 481 F.3d at 1377.

5. Obviousness

A claim is invalid as obvious under 35 U.S.C. § 103 if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (citation and internal quotation marks omitted).

In *KSR v. Teleflex*, the Supreme Court held that a “person of ordinary skill is also a person of ordinary creativity, not an automaton” and:

when a patent “simply arranges old elements with each performing the same function it had been known to perform” and yields no more than one would expect from such an arrangement, the combination is obvious. . . .”

550 U.S. at 417, 421. “Moreover, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill” or if “a piece of prior art ready for the improvement” the patent is obvious. *Id.* at 401. Therefore, “a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* In addition, courts may not “ignore

the modifications that one skilled in the art would make to a device borrowed from the prior art.” *In re ICON Health & Fitness Inc.*, 496 F.3d 1374, 1382 (Fed. Cir. 2007); *see also Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (common knowledge supplied “reader” limitation for invalidating combination, “readers were well-known in the art at the time”).

While the ultimate determination concerning obviousness is a matter of law, it is based on underlying factual determinations regarding: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of non-obviousness (e.g., commercial success, long-felt but unsolved needs, and failure of others”). *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966); *KSR*, 550 U.S. at 427. Furthermore, whether “the relevant skilled artisan had a motivation to combine pieces of prior art in the way eventually claimed in the patent at issue” is also a question of fact that is relevant to the ultimate determination of obviousness. *Intercontinental Great Brands LLC v. Kellogg N.A. Co.*, 869 F.3d 1336, 1343 (Fed. Cir. 2017). Prior art references must be considered together in combination and “[o]bviousness is determined based on the teachings in the prior art, and whether it would have been obvious to select and combine these teachings. *Intellectual Ventures I LLC v. Motorola Mobility LLC*, 870 F.3d 1320, 1335 (Fed. Cir. 2017). To determine whether there was an apparent reason to combine references, it will be

necessary “to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” *KSR*, 550 U.S. at 417-18. Furthermore, “the test for obviousness is not whether the features of a secondary reference can be bodily incorporated into the structure of the primary reference.” *Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC*, 825 F.3d 1373, 1381 (Fed. Cir. 2016). Instead, the test for obviousness requires that the references must be read for what they teach *in combination* from the perspective of a person of ordinary skill in the art (“POSITA”). *In re Mouttet*, 686 F.3d 1322, 1333 (Fed. Cir. 2012).

Obviousness can be established by noting that “there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims.” *KSR*, 550 U.S. at 420. Furthermore, it is not only the specific problem motivating the patentee which is relevant, but rather “any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* In addition, because “[a] person of ordinary skill is also a person of ordinary creativity,” he will be able to “fit the teachings of multiple patents together like pieces of a puzzle,” regardless of whether each piece of prior art was designed to solve the problem at hand. *Id.* at 420-21; *see also Leapfrog Enters*, 485 F.3d at 1161-62.

Because obviousness is to be judged under “an expansive and flexible approach” driven by “common sense,” an award of patentability requires “more than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 415-18. This flexible standard expands the obviousness analysis beyond just “published articles and the explicit content of issued patents.” *Id.* at 419. As the Supreme Court has articulated, a patent that merely combines “familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 416 (recognizing that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result). Similarly, where a person of ordinary skill in the art simply pursues “known options” from a “finite number of identified, predictable solutions,” obviousness under § 103 results. *Id.* at 421.

“[S]econdary considerations of non-obviousness . . . simply cannot overcome a strong prima facie case of obviousness.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010); *see also Leapfrog Enters.*, 485 F.3d at 1162 (affirming judgment of invalidity; “[G]iven the strength of the prima facie obviousness showing, the evidence on secondary considerations [substantial evidence of commercial success, praise, and long-felt need] was inadequate to overcome a final conclusion [of obviousness].”).

To establish commercial success, the patentee must provide proof of a “nexus” between the evidence of commercial success and the patented invention. *Wyers*, 616 F.3d at 1246; *Asyst Techs., Inc. v. Emtrak, Inc.*, 544 F.3d 1310, 1316 (Fed. Cir. 2008). Nexus may only be presumed “if the marketed product embodies the claimed features, and is coextensive with them.” *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000); *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1311, 1319 (Fed. Cir. 2015) (holding that a product must both embody the claimed features and be coextensive with them in order for a nexus to be presumed). If the presumption arises, the burden shifts to the party asserting obviousness to present evidence to rebut the presumed nexus. *Brown*, 229 F.3d at 1130. If there is no presumption, then the burden is on the patentee to “show prima facie a legally sufficient relationship between that which is patented and that which is sold.” *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). “[T]he thing (product or method) that is commercially successful [must be] the invention disclosed and claimed in the patent.” *Id.* The commercial success cannot be “due to extraneous factors other than the patented invention” such as “additional unclaimed features and external factors, such as improvements in marketing.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1329 (Fed. Cir. 2016) (citations and internal quotation marks omitted).

Licenses may also provide evidence of non-obviousness to the extent there is evidence demonstrating that the success of the license was due to the merits of the claimed invention, and not “prior business relationships, or other economic reasons.” *In re Antor Media Corp.*, 689 F.3d 1282, 1294 (Fed. Cir. 2012). The Federal Circuit requires that a patent owner present “affirmative evidence of nexus where the evidence of commercial success presented as a license.” *Bosch Auto. Serv. Sols., LLC v. Matal*, 878 F.3d 1027, 1038 (Fed. Cir. 2017) (citation and internal quotation marks omitted).

6. Inventorship

Section 102(f) of the Patent Act states that a person is not entitled to a patent if “he did not himself invent the subject matter sought to be patented.” 35 U.S.C. § 102(f); *see* 35 U.S.C. § 111(a)(1) (“An application for patent shall be made, or authorized to be made, by the inventor...”)(emphasis added). Although there is a presumption that the inventors named in an issued patent are correct, a patent will be rendered invalid “if more or less than the true inventors are named.” *Trovan, Ltd. v. Sokymat SA, Irori*, 299 F.3d 1292, 1301 (Fed. Cir. 2002) (citing *Jamesbury Corp. v. United States*, 518 F.2d 1384, 1395 (Ct. Cl. 1975)); *see Pannu v. Iolab Corp.*, 155 F.3d 1344, 1349-50 (Fed. Cir. 1998).

“When a party asserts invalidity under § 102(f) due to nonjoinder, a district court should first determine whether there exists clear and convincing proof that the

alleged unnamed inventor was in fact a co-inventor.” *Pannu*, 155 F.3d at 1350. The question of incorrect inventorship must first go to a jury, and if the jury determines that the unnamed inventor was in fact a co-inventor, the patentee may invoke § 256 and the district court can hold a hearing on whether the patentee should have an opportunity to correct inventorship. *Id.*¹² Co-inventors are not required to “physically work together or at the same time,” “make the same type or amount of contribution,” or “make a contribution to the subject matter of every claim of the patent.” *Trovan*, 299 F.3d 1292 at 1302 (citation and internal quotation marks omitted). Instead, a joint inventor must only “(1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.” *In re VerHoef*, 888 F.3d at 1366 (quoting *Pannu*, 155 F.3d at 1351).

7. Indefiniteness

Pursuant to 35 U.S.C. § 112 applicable in this case, “a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent,

¹² A patentee may be estopped from correcting inventorship if it knew about the issue for more than six years and did not correct it. *Pei-Herng Hor v. Ching-Wu Chu*, 699 F.3d 1331, 1334 (Fed. Cir. 2012) (“For inventorship claims under § 256, a delay of six years after a claim accrues creates a rebuttable presumption of laches.”).

and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). Determination of claim indefiniteness is a legal conclusion that is based on underlying factual findings, which must be proven by clear and convincing evidence. *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1338 (Fed. Cir. 2008). Definiteness should be “evaluated from the perspective of someone skilled in the relevant art.” *Nautilus*, 572 U.S. at 908. Furthermore, “in assessing definiteness, claims are to be read in light of the patent’s specification and prosecution history” and measured from the viewpoint of a POSITA at the time the patent was filed. *Id.* The test for indefiniteness is whether “a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Id.* at 910. “[A] patent must be precise enough to afford clear notice of what is claimed, thereby appris[ing] the public of what is still open to them.” *Id.* at 909 (citations and internal quotation marks omitted). Therefore, “[i]t cannot be sufficient that a court can ascribe some meaning to a patent’s claims; the definiteness inquiry trains on the understanding of a skilled artisan at the time of the patent application, not that of a court viewing matters post hoc.” *Id.* at 911.

When a “word of degree” is used, the Court must determine whether the patent provides “some standard for measuring that degree.” *Biosig Instruments, Inc. v.*

Nautilus, Inc., 783 F.3d 1374, 1377-78 (Fed. Cir. 2015) (citations and internal quotation marks omitted). Although absolute or mathematical precision is not required, it is not enough to identify “*some standard* for measuring the scope of” a claim term. *Interval Licensing LLC v. AOL*, 766 F.3d 1364, 1370-71 (Fed. Cir. 2014). Rather, “[t]he claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art.” *Id.* at 1371 (citing *Nautilus*, 572 U.S. at 911 & n.8).

Section 112 ¶ 6 permits claim elements to be “expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof” and “such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C § 112. However, “failure to disclose adequate structure corresponding to the claimed function results in the claim being invalid for indefiniteness.” *Tech. Licensing Corp.*, 545 F.3d at 1338. “Whether the written description adequately sets forth structure corresponding to the claimed function must be considered from the perspective of a person skilled in the art.” *Id.* The “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997) (emphasis added). Failure to link structure to the function of the claimed means renders the

claim indefinite. *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376 (Fed. Cir. 2001). If the Court determines that a person of ordinary skill in the art would understand that the specification fails to link structure to the claimed function, then the claim is invalid as indefinite. *Id.* at 1376-77.

“[I]n cases involving computer-implemented inventions. . . the structure disclosed in the specification [must] be more than simply a general purpose computer or microprocessor;” instead, “the disclosed structure is...the special purpose computer programmed to perform the disclosed algorithm.” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008) (citation and internal quotation marks omitted).

III. Damages

A. Issues

- If one or more of the patents-in-suit is/are found to be valid and infringed by Defendants’ use or sale of the MIC2000, whether Plaintiffs are entitled to monetary damages and the amount of damages based on lost profits.
- If one or more of the patents-in-suit is/are found to be valid and infringed, whether Plaintiffs are entitled to monetary damages and the amount of damages based on a reasonable royalty.

- If one or more of the '150 patent family is/are found to be valid and infringed, whether Plaintiffs have proven that they are entitled to an accounting of damages and the amount of damages for post-trial infringement of the '150 patent family.
- If one or more of the patents-in-suit is/are found to be valid and infringed, whether Plaintiffs have proven that they are entitled to enhanced damages under 35 U.S.C. § 284 and the amount of those damages.¹³

B. Legal Authority

1. Damages Generally

Upon a finding of patent infringement, the patentee shall be awarded “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interests and costs as fixed by the court.” 35 U.S.C. § 284. The amount of a prevailing patentee’s damages is a finding of fact on which the patentee bears the burden of proof by a preponderance of the evidence. *Transclean Corp. v.*

¹³ Defendants do not believe it is appropriate for the Court to be determining whether enhanced damages are warranted given the Court’s decision not to try willfulness at this time and the parties’ agreement not to include the issue of willfulness in this Pretrial Order.

Bridgewood Servs., Inc., 290 F.3d 1364, 1370 (Fed. Cir. 2002); *see also SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 926 F.2d 1161, 1164 (Fed. Cir. 1991).

2. Lost Profits

“[T]he patentee needs to have been selling some item, the profits of which have been lost due to infringing sales, in order to claim damages consisting of lost profits.” *Poly-Am., L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1311 (Fed. Cir. 2004); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1548 (Fed. Cir. 1995) (en banc) (“Normally, if the patentee is not selling a product, by definition there can be no lost profits.”). A patent holder or exclusive licensee may only recover its own lost profits; it cannot recover lost profits due to sales of products made by a licensee. *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, 778 F.3d 1365, 1375 (Fed. Cir. 2015), *vacated on other grounds*, *Medtronic Sofamor Danek USA, Inc. v. NuVasive, Inc.*, 136 S. Ct. 893 (2016)) (“Under our case law a patentee may not claim, as its own damages, the lost profits of a related company.”); *Poly-Am.*, 383 F.3d at 1311; *see also Novozymes A/S v. Genencor Int’l, Inc.*, 474 F. Supp. 2d 592, 604 (D. Del. 2007).

“To recover lost profits, the patent owner must show ‘causation in fact,’ establishing that ‘but for’ the infringement, he would have made additional profits.” *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999). This requires evidence sufficient to show “a reasonable

probability that the patentee would have made the sale . . . had the defendant not made the infringing sale.” *Kaufman Co. v. Lantech, Inc.*, 926 F.2d 1136, 1144 (Fed. Cir. 1991) (affirming denial of lost profits damages where patentee “failed to show the amount of profit the patentee would have made if the [defendant] had made the infringing sales”). “Under the entire market value rule applicable to lost profits awards, a patentee must prove the invention in suit created consumer demand for the patented and infringing products.” *Rite-Hite*, 56 F.3d at 1557.

The traditional framework for establishing lost profits damages is under the four-factor *Panduit* test.

To obtain as damages the profits on sales he would have made absent the infringement, i. e., the sales made by the infringer, a patent owner must prove: (1) demand for the patented product, (2) absence of acceptable noninfringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made.

Panduit Corp. v. Stahl Bros. Fibre Works, 575 F.2d 1152, 1156 (6th Cir. 1978).

Where the patentee relies on a two-supplier market theory, “the two-supplier market test collapses the first two *Panduit* factors into one ‘two suppliers in the relevant market’ factor.” *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1124, 65 U.S.P.Q. 2d 1695 (Fed. Cir. 2003). Accordingly, when relying on a two-supplier market, a patentee must show:

1) the relevant market contains only two suppliers, 2) its own manufacturing and marketing capability to make the sales that were diverted to the infringer, and 3) the amount of profit it would have made from these diverted sales.

Id. The existence of a two-player market may be rebutted by showing other non-infringing alternatives. *See, e.g., Grain Processing Corp.*, 185 F.3d at 1349 (holding that the existence of a non-infringing substitute prevented recovery under a two-supplier market theory).

The lost profits analysis requires detailed consideration of the market—it is necessary to determine what would have occurred had there never been any infringement. *See id.* at 1350. While such a market reconstruction is a hypothetical exercise, *Grain Processing* teaches that it must not “laps[e] into pure speculation.” *Id.* Hence, a determination of lost profits “requires sound economic proof of the nature of the market and likely outcomes with infringement factored out of the economic picture.” *Id.*

An alleged infringer cannot be considered to have simply stood still in the absence of infringement: “a fair and accurate reconstruction of the ‘but for’ market also must take into account, where relevant, alternative actions the infringer foreseeably would have undertaken had he not infringed.” *Id.* at 1350-51. In particular, “[w]ithout the infringing product, a rational would- be infringer is likely to offer an acceptable noninfringing alternative.” *Id.* at 1351.

Moreover, a patentee is not entitled to recover lost profits damages if it fails to establish that there are no acceptable non-infringing substitutes for the patented product. *See SmithKline Diagnostics*, 926 F.2d at 1165. A damages expert's analysis "must consider the impact of such alternate technologies on the market as a whole." *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1381 (Fed. Cir. 2013). Non-infringing substitutes that were available during the infringement period "can preclude or limit lost profits." *Grain Processing Corp.*, 185 F.3d at 1353; *see also id.* at 1351 ("[A] rational would-be infringer is likely to offer an acceptable noninfringing alternative, if available, to compete with the patent owner rather than leave the market altogether.").

The universe of non-infringing alternatives "is not limited . . . to substitute technologies." *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, No. IP 96-1718-CH/K, 2002 WL 1801525, at *77 (S.D. Ind. July 5, 2002), *aff'd in part and rev'd in part on other grounds*, 381 F.3d 1371 (Fed. Cir. 2004). The Federal Circuit has held that a damages expert may "reconstruct" the "but for" market based on any theory supported by "reliable economic evidence." *Crystal Semiconductor Corp. v. TriTech Microelecs. Int'l, Inc.*, 246 F.3d 1336, 1355 (Fed. Cir. 2001). The universe of noninfringing alternatives has been held to include alternative technologies, licensed products, and actions an alleged infringer could have taken to either acquire or maintain a license to the asserted patent. *See, e.g. Cardiac*

Pacemakers, 2002 WL 1801525, at *77 (“[T]he reasonable non-infringing alternative was not to close on the merger. . . . Accordingly, the jury reasonably found that no lost profits had been proven.”); *Schneider (Europe) AG v. SciMed Life Sys., Inc.*, 852 F. Supp. 813, 858 (D. Minn. 1994) (“A licensed product is an acceptable non-infringing alternative as of the time that it is licensed.”), *aff’d*, 60 F.3d 839 (Fed. Cir. 1995); *Crystal Semiconductor*, 246 F.3d at 1355 (“This court has affirmed . . . a wide variety of reconstruction theories.”).

Once a defendant posits a non-infringing alternative, the burden is on the patentee to prove that it is not acceptable. *Zygo Corp. v. Wyko Corp.*, 79 F.3d 1563, 1571 (Fed. Cir. 1996).

A patentee may also meet the second *Panduit* factor by using a market share approach where the patentee recovers lost profits on the percentage of infringing sales equal to its market share. *BIC Leisure Prods., Inc. v. Windsurfing Int’l, Inc.*, 1 F.3d 1214, 1219 (Fed. Cir. 1993). However, in order to meet this burden, the patentee must show “an established market share.” *Izumi Prods. Co. v. Koninklijke Philips Elecs. N.V.*, 315 F. Supp. 2d 589, 614 (D. Del. 2004). A patentee must also adjust the market share percentages to account for price elasticity of demand. *Crystal Semiconductor*, 246 F.3d at 1357 (“In a credible economic analysis, the patentee cannot show entitlement to a higher price divorced from the effect of that higher price on demand for the product.”).

3. Reasonable Royalty

“The methodology of assessing and computing damages under 35 U.S.C. § 284 is within the sound discretion of the district court.” *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 898 (Fed. Cir. 1986). One approach for calculating a reasonable royalty is through a hypothetical negotiation analysis considering the factors set forth in *Georgia-Pacific Corp v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1357 (Fed. Cir. 2012) (“The [reasonable] royalty may be based upon an established royalty, if there is one, or if not, upon the supposed result of hypothetical negotiations between the plaintiff and defendant.”) (citation omitted). The reasonable royalty analysis aims to capture what the infringer, acting as a prudent licensee, would have been willing to pay as a royalty and yet be able to make a reasonable profit, and what amount would have been acceptable to the patent holder, acting as a prudent patentee who was willing to grant a license. *Georgia-Pacific Corp.*, 318 F. Supp. at 1121-22.

“Where small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components of that product.” *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 66–67 (Fed. Cir. 2012). Thus, it is generally required that royalties be based not on the

entire product, but instead on the “smallest salable patent-practicing unit.” *Id.* (quoting *Cornell Univ. v. Hewlett–Packard Co.*, 609 F. Supp. 2d 279, 283, 287–88 (N.D.N.Y. 2009)). A patentee may assess damages based on the entire market value of the accused product only where the patented feature creates the “basis for customer demand” or “substantially create[s] the value of the component parts.” *Lucent*, 580 F.3d at 1336; *Rite-Hite*, 56 F.3d at 1549; accord *LaserDynamics*, 694 F.3d at 67 (to apply the entire-market-value rule, a patentee must show that the demand for the entire product is attributable to the patented feature).

“[T]he patent holder should only be compensated for the approximate incremental benefit derived from his invention.” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1233 (Fed. Cir. 2014). The patent holder must accordingly “give evidence tending to separate or apportion the defendant’s profits and the patentee’s damages between the patented feature and the unpatented features” *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014) (quoting *Garretson v. Clark*, 111 U.S. 120, 121 (1884)). The Federal Circuit has held that “a reasonable royalty analysis requires a court to hypothesize, not to speculate. . . . [T]he trial court must carefully tie proof of damages to the claimed invention’s footprint in the market place.” *ResQNet*, 594 F.3d at 869; *Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, 879 F.3d 1332, 1350-51 (Fed. Cir. 2018). A damages theory must be based on “sound economic and factual predicates.” *Riles v. Shell Exploration &*

Prod. Co., 298 F.3d 1302, 1311 (Fed. Cir. 2002). “Any evidence unrelated to the claimed invention does not support compensation for infringement but punishes beyond the reach of the statute.” *ResQNet*, 594 F.3d at 869. If the patentee fails to tie the theory to the facts of the case, the testimony must be excluded. *Uniloc*, 632 F.3d at 1315.

To determine a reasonable royalty, a jury must find the royalty that would have been agreed to in a hypothetical negotiation between a willing licensee and willing licensors. *Lucent*, 580 F.3d at 1324–25; accord *Fujifilm Corp. v. Benun*, 605 F.3d 1366, 1372 (Fed. Cir. 2010). Deciding the amount of the reasonable royalty is a question of fact. See *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995). The Federal Circuit has explained that “[t]he correct determination of [the hypothetical negotiation] date is essential for properly assessing damages.” *Integra Lifesciences I, Ltd. v. Merck KGaA*, 331 F.3d 860, 870 (Fed. Cir. 2003), *vacated and remanded on other grounds*, 545 U.S. 193 (2005). Generally, “the date of the hypothetical negotiation is the date that the infringement began.” *LaserDynamics*, 694 F.3d at 75; see also *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1363–64 (Fed. Cir. 2006) (“[T]he hypothetical negotiation relates to the date of first infringement.”).

A determination of the royalty stemming from a hypothetical negotiation is usually made by assessing factors such as those set forth in *Georgia-Pacific Corp.*

v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). *Rite-Hite*, 56 F.3d at 1554–55. These factors include:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or nonrestricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
7. The duration of the patent and the term of the license.

8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business

proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

Where the only infringing activity is the use of the infringing product, as opposed to the sale of the infringing product, the reasonable royalty should not be calculated based on the sales of the product, and instead should be calculated based on “the amount that a licensee may pay for the right to use a patented product or process, such as flat fees.” *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1350 (Fed. Cir. 2000); *see also Oak Indus., Inc. v. Zenith Elecs. Corp.*, 726 F. Supp. 1525, 1543 (N.D. Ill. 1989) (in a case of infringing “use,” a reasonable royalty should not be calculated based on all units capable of infringing because doing so “would impose liability on [defendant] for non-infringing use”).

4. Post-Trial Accounting¹⁴

The Federal Circuit recognizes a plaintiff's right to a post-trial accounting of infringing sales if a patent is found valid and infringed. *See, e.g., Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 582 F.3d 1288, 1303 (Fed. Cir. 2009) (“A damages award for pre-verdict sales of the infringing product does not fully compensate the

¹⁴ While Plaintiffs included this as an issue in their Statement of Law, Plaintiffs did not provide any legal authority on this point. Defendants are providing it out of an abundance of caution.

patentee because it fails to account for post-verdict sales.”). However, a “right to a post-verdict accounting is not an unlimited after-hours hunting license.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1380-81 (Fed. Cir. 2013). District Courts are to limit the scope of a post-trial accounting to “post-verdict infringing sales, if any, which are substantially related to the direct infringement by [the Defendant] which the district court finds supported by the existing record.” *Id.*

5. Enhanced Damages

Upon a finding of willful infringement, a district court may, at its discretion, grant enhanced damages. *See* 35 U.S.C. § 284 (1994); *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826, 23 (Fed. Cir. 1992), *abrogated on other grounds by Markman*, 52 F.3d at 975. Enhanced damages “are not to be meted out in a typical infringement case, but are instead designed as a ‘punitive’ or ‘vindictive’ sanction for egregious infringement behavior. The sort of conduct warranting enhanced damages has been variously described in our cases as willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate.” *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1932 (2016).

While willful infringement may allow enhanced damages, such a finding does not compel the district court to grant them. *Id.* at 1933. “An award of enhanced damages does not necessarily flow from a willfulness finding.” *Presidio*

Components, Inc. v. Am. Tech. Ceramics Corp., 875 F.3d 1369, 1382 (Fed. Cir. 2017) (citing *Halo*, 136 S. Ct. at 1932; *WBIP*, 829 F.3d at 1341 n.13). “Discretion remains with the court to determine whether the conduct is sufficiently egregious to warrant enhanced damages.” *Id.* (citing *WBIP*, 829 F.3d at 1341 n.13). “In determining whether enhanced damages are appropriate, courts should consider the overall circumstances of the case.” *Id.* (citing *Halo*, 136 S. Ct. at 1933).

Factors the court may take into consideration when determining whether, and to what extent, to exercise its discretion to enhance damages include: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other’s patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer’s behavior as a party to the litigation; (4) the infringer’s size and financial condition; (5) the closeness of the case; (6) the duration of the infringer’s misconduct; (7) any remedial action by the infringer; (8) the infringer’s motivation for harm; and (9) whether the infringer attempted to conceal its misconduct. *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1244–45 & n.6 (Fed. Cir. 2017) (citing *Read*, 970 F.2d at 827). No one *Read* factor is dispositive, but rather, the paramount determination in deciding whether to grant enhanced damages and the amount thereof is the egregiousness of the infringer’s conduct based on all of the facts and circumstances. *Power Integrations, Inc. v.*

Fairchild Semiconductor Int’l, Inc., No. 04-1371-LPS, D.I. 795 at 12–13 (D. Del. Jan. 19, 2011).

IV. No Injunctive Relief

A. Issues

- If one or more of the ’150 patent family is/are found to be valid and infringed, whether Plaintiffs have shown they are entitled to a permanent injunction.
- If one or more of the ’150 patent family is/are found to be valid and infringed and Plaintiffs show that they are entitled to a permanent injunction, whether Plaintiffs have shown that they are entitled to an order that requires the recall, removal, seizure, or destruction of all infringing products currently in the marketplace.

B. Legal Authority

1. Permanent Injunction

“[T]he decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that such discretion must be exercised consistent with traditional principles of equity. . . .” *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006). A plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. “[A] plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that

remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.” *Id.* at 391. A patentee’s prolonged or undue delay in commencing legal proceedings and seeking injunctive relief evinces a lack of irreparable harm. *See Apple, Inc. v. Samsung Elecs. Co.*, 678 F.3d 1314, 1325-26 (Fed. Cir. 2012).

“[I]f the plaintiff’s injury can be adequately redressed with a less severe remedy, ‘recourse to the additional and extraordinary relief of an injunction’ is not warranted.” *Riverbed Tech., Inc. v. Silver Peak Sys., Inc.*, No. CV 11- 484-RGA, 2014 WL 4695765, at *3 (D. Del. Sept. 12, 2014) (citation omitted). “[P]rior licenses weigh[] against a finding of irreparable harm.” *Nichia Corp. v. Everlight Ams., Inc.*, 855 F.3d 1328, 1343–44 (Fed. Cir. 2017). Such licensing activity is also evidence that monetary damages are adequate to compensate for any infringement. *Id.*; *Edwards Lifesciences AG v. CoreValve, Inc.*, C.A. 08-91-GMS, 2011 WL 446203, at *15 (D. Del. Feb. 7, 2011), *aff’d in part, remanded in part*, 699 F.3d 1305 (Fed. Cir. 2012); *Cordance Corp. v. Amazon.com, Inc.*, 730 F. Supp. 2d 333, 341 (D. Del. 2010).

Absence of competition between the patent holder and alleged infringer weighs against a finding of irreparable harm. *See, e.g., ActiveVideo Networks, Inc.*

v. Verizon Commc'ns, Inc., 694 F.3d 1312, 1337 (Fed. Cir. 2012); *Nichia*, 855 F.3d at 1341.

2. Recall

While courts have the ability to issue a recall order in conjunction with an injunction, courts cannot order the recall of accused products for which they have already received full compensation in the form of money damages. *See Amstar Corp. v. Envirotech Corp.*, 823 F.2d 1538, 1549 (Fed. Cir. 1987) (“Having been awarded full compensation for the making and using of existing infringing [products], therefore, [the plaintiff] is not entitled to enjoin their use.”); *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1563 (Fed. Cir. 1983) (“Upon receiving full compensation for the making and using of existing infringing [products], [plaintiffs] are not thereafter entitled to enjoin use of such [products].”). Further, to the extent that a plaintiff requests a recall, the court should consider the broad scope of the relief requested in weighing the *eBay* factors for issuing an injunction. *See Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440, 443-44 (D. Del. 2007) (finding that the plaintiff that requested a recall did not put forward sufficient proof under *eBay* “vis-à-vis the broad scope of the relief requested”).

V. Miscellaneous Issues

A. Issues

- Whether either party is entitled to costs, and if so, the amount of such award.
- Whether either party is entitled to a finding that this is an exceptional case under 35 U.S.C. § 285 and whether Plaintiffs are entitled to an award of attorneys' fees.¹⁵
- If one or more of the patents-in-suit is/are found to be valid and infringed, whether Plaintiffs are entitled to an award of prejudgment or post-judgment interest and the amount of such award.
- Whether Plaintiffs' are entitled to the filing date of November 15, 2002 for U.S. Provisional Patent Application No. 60/426,622 for the '150 Patent family.

B. Legal Authority

1. Costs

Federal Rule of Civil Procedure 54 states “[u]nless a federal statute, these rules, or a court order provides otherwise, costs—other than attorney’s fees—should be allowed to the prevailing party.” Fed. R. Civ. P. 54(d)(1). Section 1920 of Title

¹⁵ Defendants do not believe it is appropriate for the Court to be determining whether attorneys’ fees are warranted given the Court’s decision not to try willfulness, inequitable conduct, or the antitrust claims at this time.

28 of the United States Code includes the following costs: (1) fees of the clerk and marshal; (2) fees for printed or electronically recorded transcripts necessarily obtained for use in this case; (3) fees and disbursements for printing and witnesses; (4) fees for exemplification and the costs of making copies of any materials where the copies are necessarily obtained for use in the case; (5) docket fees under 28 U.S.C. § 1923; and (6) compensation of court appointed experts, compensation of interpreters, and salaries, fees, expenses, and costs of special interpretation services under. *See also* D. Del. L.R. 54.1.

2. Attorneys' Fees

Section 285 of Title 35 of the United States Code states that “[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party.” The party seeking attorneys’ fees has the burden of proving entitlement to fees under § 285 by a preponderance of evidence. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 557 (2014). An exceptional case is “one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated” and “[d]istrict courts may determine whether a case is ‘exceptional’ in the case-by-case exercise of their discretion, considering the totality of the circumstances.” *Id.* at 554.

3. Prejudgment and Post-Judgment Interest

An award of prejudgment interest is not required whenever infringement is found. *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 656-57 (1983). However, prejudgment interest may be awarded on any award of damages. *See* 35 U.S.C. § 284; *see also Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 555 (Fed. Cir. 1984) (prejudgment interest “should ordinarily be awarded” on awards of lost profits and reasonable royalty) (citation omitted). In general, “prejudgment interest should be awarded from the date of infringement to the date of judgment.” *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 800 (Fed. Cir. 1988) (citing *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 656 (1983)).

“Postjudgment interest is awarded on monetary judgments recovered in all civil cases,” including ones for patent infringement. *Transmatic, Inc. v. Gulton Indus., Inc.*, 180 F.3d 1343, 1347 (Fed. Cir. 1999). Post-judgment interest is governed by regional circuit law. *Id.* at 1348. Interest begins to accrue on the date of the entry of judgment. *Loughman v. Consol-Pennsylvania Coal Co.*, 6 F.3d 88, 97 (3d Cir. 1993).

4. Benefit of provisional application’s filing date

The burden is on the patentee “to come forward with evidence to prove entitlement to claim priority to an earlier filing date.” *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305-06 (Fed. Cir. 2008). In order to be entitled to the

provisional application's earlier filing date, "the specification of the *provisional* must 'contain a written description of the invention and the manner and process of making and using it, in such full, clear, concise, and exact terms,' 35 U.S.C. § 112 ¶ 1, to enable an ordinarily skilled artisan to practice the invention *claimed* in the *non-provisional* application." *New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co.*, 298 F.3d 1290, 1294 (Fed. Cir. 2002). Whether the provisional application meets the written description or enablement requirements is a question of fact. *See Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1331-32 (Fed. Cir. 2009).

PRETRIAL ORDER EXHIBIT 6

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

EXHIBIT 6:

Plaintiffs' Witness List

I. Plaintiffs' List of Witnesses

Plaintiffs may call the following witnesses to testify in their case-in-chief or in rebuttal to Defendants' case-in-chief, either in person or by deposition. Plaintiffs reserve the right to amend or supplement this list in response to Defendants' positions, decisions by the Court, or other circumstances that may change prior to trial. Witnesses marked with an asterisk (*) are those that Plaintiffs currently expect to testify in person at trial in their case-in-chief.

1. Michael Akemann*
2. Ann Marie Blackmon
3. Ben Branson
4. James Farrell*
5. Andrew Geppert
6. Dinsh Guzdar*
7. George Holder
8. Thomas Holder
9. Daniel Maynes*
10. Brian O'Flynn
11. Chuck Preston
12. Ernest Pryor
13. Alex Raring

14. Michael Sandford
15. Bruce Tharp
16. Gregg Trepp
17. Jens Voges*
18. Zachary Waite
19. Brian Williams
20. Henry Wood
21. Lawrence Wu
22. Defendants Hamilton Beach or Hershey Creamery, through their
designated corporate witnesses.

IN THE UNITED STATES DISTRICT
COURT FOR THE DISTRICT OF
DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

Exhibit 6

Defendants' Objections to Plaintiffs' [Burden] Witness List

Defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively, "Defendants") submit its Objections to Plaintiffs' Witness List. In addition to its specific objections identified in the charts below, Defendants generally object to the presentation of deposition testimony of any witness that is available or appears at trial for any purpose, other than impeachment. Defendants also generally object to the inclusion of objections made by counsel in any designated deposition testimony. Defendants object to any witnesses designated by Plaintiffs that is the subject of Defendants' Daubert motions or motions to strike or motions *in limine*. Defendants reserve the right to amend, supplement, modify

or withdraw any of the objections leading up to and at trial. Defendants reserve the right to object to any testimony as inadmissible under the Federal Rules of Civil Procedure or Evidence. Defendants also reserve the right to seek to introduce any testimony and/or call any witness listed in Plaintiffs' Witness List, if otherwise admissible. Defendants also reserve the right to utilize deposition designations made by Plaintiffs, as well as undesignated portions of deposition testimony for demonstratives, impeachment purposes, or rebuttal.

Witness	Defendants' Objections
Michael Akemann*	Defendants object to any testimony or opinion of Dr. Akemann that has not been properly and sufficiently disclosed during fact or expert discovery. <i>See</i> Fed. R. Civ. P. 26, 37. Defendants further object to the testimony of Dr. Akemann to the extent it is inadmissible under Federal Rules of Evidence 702 and 703. <i>See</i> D.I. 174. Defendants further object that Dr. Akemann cannot offer any rebuttal opinions that he has not sufficiently described in his expert reports.

Ann Marie Blackmon	<p>Defendants object to Plaintiffs calling Ms. Blackmon to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Ms. Blackmon's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Ben Branson	<p>Defendants object to Plaintiffs calling Mr. Branson to the extent they seek to introduce testimony that is needlessly duplicative of other witnesses on Plaintiffs' witness list. In particular, Plaintiffs have identified two other technical employees of Defendants as witnesses. <i>See</i> Fed. R. Civ. P. 403. Defendants also object to Plaintiffs calling Mr. Branson to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Branson's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
James Farrell*	<p>Defendants object to Plaintiffs calling Mr. Farrell to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Farrell's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>

Andrew Geppert	Defendants object to Plaintiffs calling Mr. Geppert to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Geppert's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.
Dinsh Guzdar*	Defendants object to Plaintiffs calling Mr. Guzdar to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Guzdar's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403. Defendants further object to the extent Plaintiffs' designation of deposition testimony is not permitted by Fed. R. Civ. P. 32.

George Holder	Defendants object to Plaintiffs calling Mr. Holder to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Holder's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.
Thomas Holder	Defendants object to Plaintiffs calling Mr. Holder to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Holder's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.

Daniel Maynes*	Defendants object to any testimony or opinion of Dr. Maynes that has not been properly and sufficiently disclosed during fact or expert discovery. <i>See</i> Fed. R. Civ. P. 26, 37. Defendants further object to the testimony of Dr. Maynes to the extent it is inadmissible under Federal Rules of Evidence 702 and 703. <i>See</i> D.I. 174. Defendants further object that Dr. Maynes cannot offer any rebuttal opinions that he has not sufficiently described in his expert reports.
Brian O’Flynn	Defendants object to Plaintiffs calling Mr. Wood to the extent they seek to introduce testimony that is needlessly duplicative of other witnesses on Plaintiffs’ witness list. <i>See</i> Fed. R. Evid. 403. In particular, Plaintiffs have identified at least two other Hamilton Beach Employees to testify regarding business cases related to development of the accused products. Defendants object to Plaintiffs calling Mr. O’Flynn to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. O’Flynn’s testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is otherwise irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.

Chuck Preston	Defendants object to Plaintiffs calling Mr. Preston to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Preston's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.
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Ernie Pryor	<p>Defendants object to Plaintiffs calling Mr. Pryor to the extent they seek to introduce testimony that is needlessly duplicative of other witnesses on Plaintiffs' witness list. In particular, Plaintiffs have identified two other technical employees of Defendants as witnesses. <i>See</i> Fed. R. Civ. P. 403. Defendants also object to Plaintiffs calling Mr. Pryor to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Pryor's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is otherwise irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Alex Raring	<p>Defendants object to Plaintiffs calling Mr. Raring to the extent they seek to admit his testimony as a 30(b)(6) witness regarding Defendants' opinion of counsel because such testimony is irrelevant to the liability and damages trial. <i>See</i> Fed. R. Evid. 402. Defendants also object to Plaintiffs calling Mr. Raring to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Raring's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Michael Sandford	<p>Defendants object to Plaintiffs calling Mr. Sandford to the extent they seek to introduce deposition testimony that is outside of the scope of his 30(b)(6) designation, and for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Sandford's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Bruce Tharp	<p>Defendants object to Plaintiffs calling Dr. Tharp in their case-in-chief as either a fact or expert witness. Plaintiffs have never disclosed Dr. Tharp as an expert witness. <i>See</i> Fed. R. Civ. P. 37(c). Further, Plaintiffs never identified him in their Rule 16 Initial Disclosures or in any discovery responses as someone whose testimony Plaintiffs may rely upon at trial. <i>See</i> Fed. R. Civ. P. 26(a), 37(a). To the extent that the Court allows him to testify, Defendants object to Plaintiffs calling Dr. Tharp to the extent they seek to introduce testimony that is outside of the scope of his expert report, and for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602, 702. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Dr. Tharp's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Greg Trepp	<p>Defendants object to Plaintiffs calling Mr. Trepp to the extent they seek to introduce testimony that is needlessly duplicative of other witnesses on Plaintiffs' witness list. <i>See</i> Fed. R. Evid. 403. In particular, Plaintiffs have identified at least two other Hamilton Beach Employees to testify regarding business cases related to development of the accused products. Defendants object to Plaintiffs calling Mr. Trepp to the extent they seek to introduce deposition testimony tfor which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Trepp's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is otherwise irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Jens Voges*	<p>Defendants object to Plaintiffs calling Mr. Voges to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Voges' testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403. Defendants further object to the extent Plaintiffs' designation of deposition testimony is not permitted by Fed. R. Civ. P. 32.</p>
Zachary Waite	<p>Defendants object to Plaintiffs calling Mr. Waite to the extent they seek to introduce deposition testimony that is outside of the scope of his 30(b)(6) designation, and for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Waite's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>

Brian Williams	<p>Defendants object to Plaintiffs calling Mr. Williams to the extent they seek to introduce testimony that is needlessly duplicative of other witnesses on Plaintiffs' witness list. In particular, Plaintiffs have identified two other technical employees of Defendants as witnesses. <i>See</i> Fed. R. Civ. P. 403. Defendants also object to Plaintiffs calling Mr. Williams to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Williams' testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is otherwise, needlessly cumulative, irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Henry Wood	<p>Defendants object to Plaintiffs calling Mr. Wood to the extent they seek to introduce testimony that is needlessly duplicative of other witnesses on Plaintiffs' witness list. <i>See</i> Fed. R. Evid. 403. In particular, Plaintiffs have identified at least two other Hamilton Beach Employees to testify regarding business cases related to development of the accused products. Defendants object to Plaintiffs calling Mr. Wood to the extent they seek to introduce testimony for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Mr. Wood's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is otherwise irrelevant, needlessly cumulative, and/or likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
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Lawrence Wu	<p>Defendants object to Plaintiffs calling Dr. Wu in their case-in-chief as either a fact or expert witness. Plaintiffs have never disclosed Dr. Wu as an expert witness. <i>See</i> Fed. R. Civ. P. 37(c). Further, Plaintiffs never identified him in their Rule 16 Initial Disclosures or in any discovery responses as someone whose testimony Plaintiffs may rely upon at trial. <i>See</i> Fed. R. Civ. P. 26(a), 37(a). Further, Dr. Wu's testimony is exclusively regarding the antitrust issues that have been bifurcated, thus, it is irrelevant. <i>See</i> Fed. R. Evid. 402. To the extent that the Court allows him to testify, Defendants object to Plaintiffs calling Dr. Wu to the extent they seek to introduce testimony that is outside of the scope of his expert report, and for which the witness lacks personal knowledge or to the extent the witness is not competent to testify. <i>See</i> Fed. R. Evid. 601, 602, 702. Defendants further object to the extent Plaintiffs seek to introduce testimony that constitutes improper lay witness opinion. <i>See</i> Fed. R. Evid. 701. Defendants further object to the extent Dr. Wu's testimony is inadmissible under Federal Rules of Evidence 408 or 802, or is irrelevant and likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>
Defendants Hamilton Beach or Hershey Creamery, through their designated corporate witness	<p>Defendants object to Plaintiffs calling any witnesses not disclosed in their initial disclosures. Defendants object to the extent any testimony sought is in violation of Fed. R. Evid. 802, is irrelevant, or is likely to confuse the jury. <i>See</i> Fed. R. Evid. 402, 403.</p>

PRETRIAL ORDER

EXHIBIT 7

IN THE UNITED STATES DISTRICT
COURT FOR THE DISTRICT OF
DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

Exhibit 7

Defendants' Witness List

Defendants' Witness List is provided below. Subject to availability of each witness at the time of trial, Defendants intend to call the following witnesses either by live testimony or by deposition. Defendants reserve the right to revise, amend, supplement, or modify this list based on any pretrial rulings by the Court and/or to address any additional issues, arguments, evidence, or other developments in the case, including edits to the draft pretrial order, any meet and confers or other negotiations between the parties, pending and anticipated motions, and similar developments. Defendants reserve the right to amend their answering/rebuttal witness list in view of events at trial or other developments,

including evidentiary rulings or other rulings by the Court. Inclusion of a witness on this list does not require Defendants to call that witness (either live or by deposition) to testify and does not imply or establish that Defendants have the power to compel the live testimony of that witness or make that witness available to Plaintiffs. Further, the inclusion of a witness on this list is not an admission that Defendants agree that witness should necessarily be permitted to testify if called by Plaintiffs and does not waive Defendants' objections to all or part of the witness's testimony. Should any witness currently identified as testifying live become unavailable before trial, Defendants reserve the right to call the witness by deposition. In addition to the witnesses identified below, Defendants reserve the right to call anyone appearing on Plaintiffs' witness list or as a corporate representative of Plaintiffs at trial.

I. Expert Witnesses

- a. Mark Peterson: Mr. Peterson is a damages expert witness with expertise on the valuation of intellectual property and the calculation of economic damages in litigation. Mr. Peterson will testify consistent with his expert report, including on issues of reasonable royalty damages and lost profits, and will also rebut any opinions of Dr. Akemann.
- b. Alexander H. Slocum, Ph.D.: Dr. Slocum is a technical expert

witness with expertise in the field of mechanical design, specifically machine design that includes the use of basic mechanical components and principles of interaction. Dr. Slocum will testify consistent with his expert reports, including on issues of infringement and validity, and will also rebut any opinions of Dr. Maynes.

- c. Bruce W. Tharp, Ph. D.: Dr. Tharp is a technical expert witness with expertise in ice cream and frozen dessert science and technology. Dr. Slocum will testify consistent with his expert reports, including on issues of infringement, and will also rebut infringement opinions of Dr. Maynes with respect to the '377 patent.

II. Non-Expert Witnesses (* indicates that the witness is currently anticipated being called live if called at all)

- a. Andrew Geppert
- b. Thomas Kramer
- c. James Farrell
- d. Brian O'Flynn*
- e. Zachary Waite*
- f. Kevin Malchoff

- g. Dinsh Guzdar
- h. Brian Williams*
- i. Jens Voges
- j. Corporate Representatives of f'real Foods, LLC and/or Rich
Products Corporation

PRETRIAL ORDER EXHIBIT 8

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.)	C.A. No. 16-41 (CFC)
)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

Exhibit 8
Plaintiffs' Deposition Designations for Their Case-in-Chief
Defendants' Objections and Counter-Designations
Plaintiffs' Objections to Defendants' Counter-Designations

Plaintiffs provide the following case-in-chief deposition designations, which are based on the parties' pleadings, documentary and testimonial evidence, and on Plaintiffs' current understanding of Defendants' claims and defenses and the Court's rulings to date. Plaintiffs designate this testimony pursuant to Fed. R. Civ. P. 26(a)(3). Plaintiffs reserve the right to revise, amend, supplemental, or modify their case-in-chief deposition designations based upon any pretrial rulings by the Court or to address any additional issues, arguments, evidence or other developments in the case, including edits to the draft pretrial order, any meet and confers or other negotiations between the parties, pending and anticipated motions, and similar developments. Plaintiffs further reserve the right to supplement these designations to rebut or otherwise address deposition designations, exhibits, or other facts identified by Defendants. All irrelevant and redundant material, including objections and colloquy of counsel will be eliminated from the deposition designations below when the designations are read to or played to the jury. Plaintiffs further reserve the right to designate any portion of the deposition transcripts of Defendants' 30(b)(6) representatives, officers, or employees should they fail to be in attendance at trial in this matter. Plaintiffs further reserve the right to later provide designations from any deposition for use in their rebuttal case and to use any portion of any deposition transcript, whether listed below or not, for purposes of impeachment.

Plaintiffs also provide the following objections to Defendants' deposition counter-designations. Plaintiffs reserve the right to revise, amend, supplement, or modify their objections and counter designations based upon any changes to Defendants' designations, in response to pretrial rulings by the Court, and/or to address any additional issues, arguments, evidence or other developments in the case, including edits to the draft pretrial order, any meet and confers or other negotiations between the parties, pending and anticipated motions, and similar developments.

Defendants set forth below their objections to Plaintiffs' designations and their counter designations. Defendants reserve the right to amend or supplement their pretrial disclosures, including these designations and objections, as part of the disclosure and meet-and-confer process leading up to trial, in response to Plaintiffs' disclosures and objections, and in response to any pretrial rulings or orders from the Court. Disclosure of any designation does not imply or establish that Defendants will use such designation and does not waive any objections that Defendants may have should Plaintiffs seek to introduce it. Defendants' objection to any Plaintiffs deposition designation does not imply or establish that Defendants cannot use such designations and does not waive Defendants' ability to introduce it.

Key to Defendants' Objections to Plaintiffs' Deposition Designations

Federal Rules of Evidence & Other Abbreviations	Objection
105	Admissible Only for Limited Purpose or Against Only One Party
106	Incomplete / Remainder of testimony should be considered
402	Not Relevant <ul style="list-style-type: none"> Evidence is inadmissible due to (1) irrelevance or (2) it is relevant but admissibility is precluded by the Constitution, a federal statute, rules of evidence
403	Relevance Outweighed By Other Factors <ul style="list-style-type: none"> Probative value of relevant evidence is outweighed by risk of: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, needlessly presenting cumulative evidence
404	Improper use of character evidence <ul style="list-style-type: none"> Character evidence generally not admissible to prove that person acted in accordance with that character trait on a particular occasion (note that there are exceptions for impeachment and to show bad character)
408	Improper use of Settlement Negotiations Evidence to prove liability or damages <ul style="list-style-type: none"> Offers of compromise and conduct and statements made during compromise negotiations about the claim are not admissible to prove or disprove the validity or amount of a disputed claim
411	Improper evidence regarding Insurance Coverage <ul style="list-style-type: none"> evidence that a person or was not insured against liability is not admissible to prove negligence or wrongful action
501	Privileged
602	Lack of Personal Knowledge or foundation (for fact testimony) under FED. R. EVID. 602, 901, 1002, 1003, 1006.

Federal Rules of Evidence & Other Abbreviations	Objection
701	Improper opinion testimony by lay witness <ul style="list-style-type: none"> • not rationally based on witness's perception; • not helpful to clearly understanding the witness's testimony or to determining a fact in issue; • based on scientific, technical, or other specialized knowledge within scope of Rule 702)
702	Improper expert testimony <ul style="list-style-type: none"> • Specialized knowledge isn't helpful to understand the evidence or determine a fact in issue; • Testimony not based on sufficient facts or data; • Testimony not the product of reliable principles and methods; or • Principles and methods not reliably applied to facts of case
703	Expert relied on unreliable data <ul style="list-style-type: none"> • Expert relied on facts/data not reasonably relied on by experts in the field
802	Hearsay <ul style="list-style-type: none"> • Out of court statement being introduced to establish the truth of the matter asserted
901	Lack of Authentication
1002	Original document required (best evidence rule)
FRCP 37	Not timely disclosed as required by discovery rules
NR	Non-responsive testimony
30(b)(6)	Beyond the scope of the FRCP 30(b)(6) designation
Q	Ambiguous, confusing, compound, or leading question; asked and answered; improper attorney argument, testimony, characterization, or repetition, question assumes fact not in evidence. FED. R. EVID. 611(a), 611(c).
MD	Multiple documents. FED. R. EVID. 901, 1003.
N	Improper narrative response
L	Subject is purely a legal matter. FED. R. EVID. 403, 602, 611(a), 701, 702, 703.
TR	Inadmissible for failure to include a translation or certified translation. FED. R. EVID. 403, 611(a).

Federal Rules of Evidence & Other Abbreviations	Objection
MIL	Subject to a motion <i>in limine</i>
MOT	Subject to pending motion - e.g., Daubert motion, SJ motion

Key to Plaintiffs' Objections to Defendants' Counter-Designations

Code	Objection
402	Not Relevant - This testimony is objectionable because it is not relevant to any claim or defense (FRE 402)
403	Confusing and Unduly Prejudicial - This testimony is objectionable because its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence (FRE 403)
404	Impermissible character evidence
408	Compromise and offer to compromise (FRE 408)
602	Lack of Personal Knowledge - This testimony is objectionable because it constitutes testimony on a matter as to which the witness lacks personal knowledge (FRE 602)
608	Opinion and Reputation Evidence/Bolstering (FRCP 608(a))
611	Argumentative/Leading (FRCP 611(a); 611(c))
701, AF	Improper Opinion - This testimony is objectionable because it is opinion testimony by a lay witness that is not reasonably based on perception and helpful to a clear understanding of the witness' testimony or the determination of a fact in dispute (FRE 701)
702-705	Inadmissible Opinion (FRE 702-705)
801 and 802	Hearsay - This testimony is objectionable because it is a statement made by one other than the declarant while testifying at trial, offered into evidence to prove the truth of the matter asserted and not subject to any hearsay exception (See FRE 801 and 802)
AA	Asked and answered
AC, WP	Attorney client privilege and/or work product immunity (FRE 501502)
BE, 1002	This testimony is objectionable because it is being used to prove the content of a writing and it is not the original writing (Best Evidence) (FRE 1002)
CS	Calls for speculation
CT	Cumulative Testimony
E	Evidentiary – Assumes facts not in evidence.

Code	Objection
F	Lacks foundation
IA	Incomplete answer or question
IMP	Impeachment - This testimony is objectionable except for use as impeachment
LC	Calls for legal conclusion
MIL	Testimony is the subject of a pending motion in limine
OB	Overbroad/violates Local Rules/Court's Orders
QW	Question withdrawn
V	Vague, ambiguous and misleading

Deponent: AnnMarie Blackmon

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
7:3-12			
9:5-10:4			
12:9-14:4			
18:13-19:5	602		
19:20-24	Q; 106	20:5-8 20:11-20	NR; 402
21:18-22:3		22:4-8	NR; 402
22:9-15		22:4-8	NR; 402
23:16-24:3	Q		
24:12-25:18	602		
42:6-44:6	602; 402; 403; Q		
45:21-46:2			
46:14-47:9	501		
49:24-50:16			
63:22-64:6		64:7-21	NR; 402
66:3-67:4	602; Q	67:6-8 67:11-12	701
68:2-7		68:8-15	701
72:9-74:10	Q	74:12-19	NR; 402; 701
77:3-78:3	Q	78:13-15	NR; 402
78:25-79:2	Q; 602	79:4-5	NR; 402
79:12-24			
89:9-91:7		162:10-14	AA; V; NR; 402
95:14-96:19		96:20-22 96:25-97:1	NR; 402
97:13-17			
98:2-10		98:11-13 98:16-24	NR; 402; 701
99:12-17		99:19-22	
100:5-11		100:12-16	NR; 402
104:12-19			
105:8-17	602; 106	105:18-22	
106:23-107:17	602	106:17-22	NR; 402
113:2-20		114:1-4	NR; 402
120:7-121:19	602; Q	122:7-10 122:13-19 122:22-25 163:13-17 163:19-22	NR; 402
125:9-126:4	403		
126:11-128:19	106; Q; 403		
130:1-133:9	403; 402	133:10 133:13-14	NR

135:21-136:2			
136:24-137:7		137:8-10	
137:11-137:24	Q		
148:9-149:6		149:11-150:3	NR; 402
150:4-11	402; 403	150:12-23	
150:24-151:9		150:12-23	
152:2-153:8	602; Q; 403		

Deponent: Ben Branson

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
6:8-16		6:17-18	
9:4-12:3	Q; 602; 403	12:8-17 12:19-13:6	701
13:19-23		13:16-18	
14:23-15:4	Q	15:5-18	701
18:2-4			
18:24-25	106		
19:5-21		20:3-5	
20:17-24	106		
21:19-22:10	Q; 602; 106	21:13 21:16-18	701
22:16-21	602; Q	22:22-24	
23:12-22	Q; 602		
24:20-23	602		
25:7-26:3	602; Q; 701	26:4-5 26:8 107:14-20	701
34:17-35:4	Q		
35:22-36:4		36:5-7	
36:22-37:4			
38:6-20			
40:4-9			
40:20-23			
41:17-20		42:5-13	
44:8-45:3	106; Q	44:2-7	
45:20-25		46:1-6	701; NR; 402
46:14-47:1	Q; 602		
47:6-11			
50:4-22	106; 602; 403	50:23-25 51:3-5	701; NR; 402
51:11-14	106; 402		
51:24-52:4	106; 602; 402		
53:2-54:4			
54:19-24			
61:8-62:1	602; 102	58:23-59:2 59:4-5	NR; 402
62:10-18		62:2-5 62:8-9	NR; 402
63:2-6			
63:16-19		63:12-15	

72:5-13		71:14-17	
73:7-74:16	Q		
80:21-22	106	80:23-81:3	
81:5-82:15	602; 106	109:1-14	402; 403
97:20-21		97:22-98:7	
98:8-15	Q	97:22-98:7	
99:2-102:5	Q; 602		
102:1-5			
102:15-103:4	602		
103:19-25	602; Q	103:14-18 104:14-15 104:18	701; NR; 402
109:20-110:2	602; Q	110:3-5 110:8	NR; 402
110:9-111:21	Q; 602	112:3-10	

Deponent: Andrew Geppert

Plaintiffs Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
216:19-217:15	NR		
220:5-9			
221:4-7			
224:10-233:5	402; 403; 602; 701; 802; Q; L	233:7-234:9 234:11-234:16 235:4-235:22 235:24-236:3	106; 402; 403; Q; L

Deponent: George Holder

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
13:4-12	Q; 602		
14:3-13		14:14-17	
15:7-16:1	402; 403		
19:12-22:5	Q		
22:9-13			
23:10-19	602		
25:12-23		25:24-26:6	106; IA
34:15-35:19		35:20-36:11	106; IA
36:12-21	106		
37:16-19	106; 602	37:4-15	F
64:15-18	106		
65:12-15		65:6-11	
66:6-9		66:2-5 66:10-14	
74:5-7			
75:3-14	106; Q; 602	75:15-17	
81:5-17			
81:23-82:7			
132:25-135:16	Q; 602; 402		

Deponent: Thomas E. Kramer

Plaintiffs Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
46:4-23	701; NR	46:24-47:8 47:12-18	106; IA; 402
47:9-11	701		
192:16-202:15	Q; 701; 602; 802; 402; 403		
194:6-202:17		203:4-204:8 204:12-206:9 206:11-207:2 207:10-208:9 208:14-210:15 211:8-13 211:18-20 211:25-212:10 212:13-25 213:13-214:4	106; IA; 402; 403

Deponent: Brian O'Flynn

Plaintiffs' Designation	Defs. Objections	Defs. Counter- Designation	Plaintiffs' Objections
8:11-25		11:1-10	
13:1-3	Q	13:6-8	
15:5-16:5			
19:17-20:19		20:24	106; IA
28:21-29:15	Q; 602; 402; 403	30:4-6 30:9-10	
30:22-31:9	Q		
33:24-34:10	Q		
35:13-36:5	Q; 602		
37:19-38:2	Q		
38:20-39:6			
39:24-40:17	Q; 602		
60:18-62:3			
70:11-71:1	602		
71:8-72:16	602		
72:23-73:5			
75:12-76:16	602; Q		
77:21-79:7	Q; 602		
83:15-85:10	Q		
87:15-24	Q		
89:4-24	106; Q; 602		
89:25-90:4			
90:8-10		90:5-7	402
93:8-94:8			
94:19-22			
98:1-101:11	602		
101:17-103:24	Q		
107:4-112:2	Q; 602; 802		
113:15-115:9	602; Q; 802		
125:24-127:1			
132:11-134:7		134:13-21	
138:24-140:22	602		
145:23-147:5	Q; 402	147:6-12	
147:25-148:12	402; 602		
149:9-25	Q		
151:9-20		159:1-3	402
157:11-158:25			
159:7-14	402; 403		
160:3-161:14	402		
162:8-166:21	106		
167:9-168:2	701; L		

168:6-173:23	701: L; 602; Q		
174:11-180:2	Q; 602		
186:25-187:3		187:4-9	
187:18-189:8	Q; 602	187:14-17	106; IA
202:9-12			

Deponent: Chuck Preston

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
11:21-13:12			
24:6-25:21			
26:12-27:5		27:6-9	
27:10-28:17		28:18-22	
28:23-30:19	602; Q	30:20-25	402
31:1-33:13	402; 403	33:14-34:4	402
43:20-44:8	602	44:9-21	
68:3-6			
69:16-72:8	602; 402; 403		
83:7-85:6	802; 402; 403		
85:19-86:20	402		
87:4-88:12	602; 402		

Deponent: Ernest B. Pryor, Jr.

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
4:8-17			
6:10-21	106		
7:6-8:10	602; 402		
9:2-25	Q; 402; 602; 106		
10:20-11:4	Q		
11:20-12:15		12:16-17 12:24-25	
13:11-15:4	Q; 602		
16:9-17	106; 602	16:20-21	
16:22-17:7	Q; 602	16:20-21 17:8-9	
17:18-18:5	Q; 602	17:11-17	
20:19-21:1	Q; 602	21:2-13	
25:1-16	Q; 602		
26:19-33:5	Q; 402; 403; 602; 701		
35:24-47:24	Q; 602; 402; 403; 701; L	100:11-14 100:17-21	402; 403
49:11-50:2			
50:13-51:4	602		
51:9-24	602; Q	51:5-8	106; IA
52:1-4			
53:3-18	602; 402; Q	53:19-21	402
54:1-25	602; Q; 701		
55:9-22	602		
67:23-68:10	106; 602	68:13-17	106; IA
68:24-70:9	Q; 602; 701		
71:21-72:20	Q; 602; 701		
72:6-20	Q; 602; 701		
73:5-18	Q; 602	73:19-25	
73:12-18			
74:9-16	Q; 602	74:3-5 74:8	
75:13-17			
75:24-76:3 Exh. QQ: 75:24-25 Exh. QQ: 76:3	701		
77:8-78:19	106; 602; 701; Q		
78:14-80:1	102; 602; 701; Q		
81:6-14	106; 602		
82:4-25	602; Q		
83:9-20	Q		

86:19-89:20	602; 402; 403; Q		
90:5-93:25	Q; 403; 701; L		

Deponent: Alexander Raring

Plaintiffs Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
9:15-10:10	402		
13:1-14:1			
29:5-24	701; Q; 402; 403		
30:23-32:22	106; Q; 402; 403		
48:2-18	Q; 602		
72:13-20	Q; 602; 402; 403		
79:2-11	701		
81:11-25	Q; 602		
84:18-87:6	Q; 701; 402; 403		
89:19-90:6	402; 403		
101:14-22	402; 403		
107:1-108:6	Q; 701; 402; 403	108:14-17	
108:25-109:2	701; 402; 403	108:21-24	
110:15-111:10	602; 402; 403; Q		
118:5-121:5	802; 402; 403; 602	121:6-8	403; 602; V; F; CS
126:3-17	30(b)(6); Q; 402; 403		
127:14-128:12	402; 403; Q; 802; 602		
144:20-146:3	701; 402		
148:3-25	402; 403	149:1	
149:6-150:18	Q; 402; 403	149:3-5	403; 602; V; F; CS
155:19-156:8	602; 402; 403		
166:7-14	602; 403		

Deponent: Michael Sanford

Plaintiffs Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
6:14-20			
11:3-12:18			
13:6-14:24	106		
16:5-17:5	Q; 402; 403		
22:10-26:20	402; Q		
37:12-39:1	Q; 402; 403; 106		
40:7-10			
41:10-42:3			
43:4-44:3	602		
46:12-17	Q; 106		
46:21-47:13	602; Q		
48:8-22	602; 402; 403		
50:10-51:9	602; Q; 402; 403		
54:9-22	Q; 403; 602; 402		
58:15-59:22	402; 403		
60:25-61:23	402; 403		
62:16-64:13	Q; 402; 403; 602		
68:15-23	403		
69:9-70:18	Q; 402; 403		
75:4-7	402; 403		
84:21-85:12	602; 403		
87:9-14	Q; 402; 403		
87:23-88:14	Q; 402; 403		
89:15-90:15	Q; 403; 402		
90:21-91:3	402		
96:4-10		96:1113	
96:19-98:5	402; 403	96:15-17	403; V
103:15-105:12	602; 403; 402; Q		
123:8-16	403		
125:12-20	30(b)(6); 602; 403		
128:23-129:4		129:6-14	
132:6-12	Q		
148:15-149:7	602; 403		
149:23-150:6	403; 701		

Deponent: Bruce Tharp

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
10:2-10:17			
11:11-12:1	702		
13:17-14:4	702	14:5-14:12	
20:8-21:11	702		
45:5-19	Q; 702		
76:5-78:13	702; 602		
86:5-87:22	702; 602	87:24-88:3 88:6-8	
95:21-96:24	702	97:1-15 188:9-190:9	189:23-24 – 403; V
101:9-102:7	702; Q		
108:6-109:5	702; 602	119:3-7 119:9-17 119:21-22	
122:1-19	702; 402		
130:4-135:7	702; Q	191:2-4 191:7-192:16	
143:10-148:1	Q; 602	183:4-187:10	185:3-6 – 403; 602
163:1-10	402		

Deponent: Thomas Holder

Plaintiffs' Designation	Defs. Objections	Defs. Counter- Designation	Plaintiffs' Objections
10:5-18	402	10:19-21	
17:9-19-6	602; 403		
48:8-25	Q; 602	49:1-15	
54:9-17		53:25-54:8	
79:17-80:16			
82:21-84:1			
84:11-86:10	Q; 602		

Deponent: Greg H. Trepp

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
11:18-22		12:1-16	
33:2-7	106		
35:17-36:4	403		
41:16-20	Q; 602		
41:22			
42:3-43:1	403; 602	43:2-5	
43:18-21	403	43:8-17	
45:8-14		45:16-18	
45:19-46:8			
53:14-54:7	Q; 602; 106	148:4-150:1 150:3	150:3 – V, F, 602, 403
54:10-11			
73:19-74:10	602; 802; 403		
76:19-77:12	602; 802; 403; Q		
85:21-86:10	Q; 403; 602		
87:7-88:4	602; 403		
89:17-90:3	403		
92:3-18	Q; 802; 403		
95:2-14	403		

Deponent: Zachary Waite 2015

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
4:11-18		4:19-5:2	
5:3-10			
6:24-7:21			
8:12-9:13	402		
9:23-9:25	30(b)(6)		
10:22-11:3	30(b)(6)		
13:4-12			
18:7-22	402		
19:4-20:1	402; 30(b)(6)		
25:2-16	30(b)(6); 403		
26:14-23	30(b)(6); 403		
33:12-25	30(b)(6); 403		
45:19-21	30(b)(6); 403		
46:4-6	30(b)(6); 403		
47:9-25	30(b)(6); 403		
50:7-12	30(b)(6); 403		
51:24-52:2	Q; 402		
52:16-53:19	30(b)(6); Q; 403; 402		
54:6-19	30(b)(6); 403		
55:6-57:9	30(b)(6); 403; 402		
61:12-19	30(b)(6); 403		
62:1-5	30(b)(6); 403		
62:25-63:11			
82:8-24	30(b)(6); 403		
83:9-16	30(b)(6); Q; 403		
83:22-25	30(b)(6); 403	84:1-3	
84:8-20	30(b)(6); 403; 402		
85:2-4	30(b)(6); 106; 402; 403		
85:9-14	30(b)(6); 602; 403		

Deponent: Zachary Waite 2018

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
12:12-13:3			
13:11-17		13:18-22	
14:8-15			
15:12-24	106; Q	15:25-16:6	
16:7-17			
17:9-18:12	403		
21:12-23			
22:9-23:8		23:9-21	701; NR; 402; 403
29:23-30:12	Q	30:13-31:5	
31:20-24			
36:12-37:1		37:2-8	
37:20-25		38:1-3	
38:4-7		38:1-3	
38:14-39:10		38:8-13 39:11-14	
40:6-10			
43:11-44:5	Q; 602; 802		
45: 4-11	106		
45:15-16	106	45:17-22	NR
46:12-19		46:20-47:3	
47:13-18			
48:8-12			
49:7-21			
50:20-25			
51:14-52:2	602	52:3-9	
52:16-21			
53:2-54:3	602; 403		
54:9-12	602		
55:22-56:22			
58:7-59:9			
59:19-24			
74:15-24	402; 403		
84:15-85:7	Q; 602; 403		
88:8-89:1	Q; 106; 602		
89:19-90:2	602	89:8-18	NR
90:9-18	602	90:19-21	
90:25-91:18	602	91:19-25	NR
92:1-13	602		
93:2-94:2	602		
95:19-96:2	Q		
96:20-24			

Plaintiffs' Designation	Defs. Objections	Defs. Counter- Designation	Plaintiffs' Objections
97:6-24	602; Q	97:25-98:11	701; NR
99:20-100:1	602		
107:3-11			
107:21-109:1	Q; 402		
115:11-23	Q		
118:21-119:10		117:21-118:20	701; NR
120:11-19			
121:4-122:13	Q; 106	120:24-121:3	
122:25-123:14		122:14-19	602
126:25-127:13	Q; 402	127:14-25	701; NR
128:4-19			
129:7-130:8	106	130:9-12	NR; 402; 403
130:20-131:13	Q; 402; 106	131:14-18	NR; 402; 403
134:14-138:4	402; 403; Q		
152:16-21			
153:17-19	Q; 403	153:20-154:4	
157:5-16	Q; 602		
160:7-10			
160:25-161:2			
161:5-13	Q; 402; 403		
162:2-10	Q		
162:15-19	Q		
163:22-164:2			
164:6-8			
164:11			
166:4-6			
166:11-19	403		
168:11-13			
168:20-21		168:22-169:7	
169:8-13		168:22-169:7	
171:7-9	Q; 106		
171:21-172:11	403		
173:8-10			
173:17-18	602		
174:12-18	402; 602		
178:8-14	Q; 402		
179:7-17	403; 106		
179:21-180:2	403		
183:9-18	403		
183:22	403		
196:10-199:12	701		
207:5-10			

Plaintiffs' Designation	Defs. Objections	Defs. Counter- Designation	Plaintiffs' Objections
207:20-24			
209:18-210:6			
210:24-211:2			
211:7-15			
227:19-228:5			
228:17-229:3	602		
229:22-230:6		230:7-10	
230:11-16	106; Q	230:17-19	NR; 402; 403
232:19-233:17	602; 802		
234:21-235:2			

Deponent: Brian P. Williams

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
10:17-11:5			
15:5-24	Q	16:1-16:12	402
16:24-17:6			
17:22-19:2	Q	19:6-12	106; IA
20:21-21:10	Q; 602; 701		
21:14-16		21:17-19	402
21:20-22:14	Q		
25:3-16	Q; 602; 402		
27:11-28:19	Q; 402; 602		
29:11-30:19	602		
31:13-32:9			
32:18-25			
33:4-35:9	Q; 602		
40:11-41:17	602; Q; 701		
42:4-43:1	Q; 602		
46:23-50:17	402; 602; 701	50:18-19	
51:2-7		50:21-51:1 51:9-21	
52:4-16	Q; 602	52:17-20 52:23-24	
54:6-21	602; Q		
56:6-17	602	56:18-22	106; IA
63:9-64:7	Q	64:9-64:13	
64:16-23			
65:1-5	106	65:7-65:8 65:10-12	402; NR
65:17-66:6			
66:11-67:17	602		
69:5-9	602; Q	69:10	
69:16-19	602	69:13-14	
70:2-72:2	602; Q		
73:25-74:6		74:7-74:9	
74:24-76:14	Q; 602; 403		
76:24-78:12	402; 602	78:14-78:17	
78:18-20	602	78:14-78:17	
79:1-13	602; Q	78:23-78:24	
80:4-81:2	602; Q; 701		
83:5-13	602		
84:15-85:2		85:3-5	402
92:8-97:14	602; Q		
100:2-11	403		

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
111:10-113:15	Q; 602; 106	113:16-113:18	
114:20-115:7	602		
115:18-116:16	602; 402; 106		
117:1-119:3	Q; 701; 402	119:5-6 119:8-9	
120:4-14			
121:5-10			
121:13-123:10	602; Q		
123:16-125:11	602		
125:7-11			
125:25-126:7	Q		
127:10-24			
128:6-23	106; Q	128:1-128:3	106; IA
129:1-4			
134:16-135:11	602		
137:10-19	602		
144:8-146:14	602		
148:13-20			
149:14-150:12	Q		
154:16-155:18			
156:5-159:8	403; 701	159:21-22	
Exh. H: 169:3-25	602; Q		
170:19-171:4	602; 402		
175:24-176:14	Q		
179:18-25	602; Q		
182:10-16			
182:24-184:15	602; Q	184:16-18 184:21	402
186:19-187:6	106; Q; 602		
188:1-11	602; Q		
191:17-193:03	Q		
194:14-195:10	602; 701		
195:19-198:4	701; 602; Q		
203:1-20	403		

Deponent: Henry Wood

Plaintiffs' Designation	Defs. Objections	Defs. Counter-Designation	Plaintiffs' Objections
9:13-22			
13:7-14:10	403		
16:24-17:7	403		
17:24-18:4	403		
21:12-22:3	403		
23:5-25:2	602; Q		
26:5-27:16	Q; 602		
30:24-31:9	Q		
31:25-32:11	Q		
33:6-34:10	Q		
35:12-36:9	Q; 106; 602		
44:1-6	Q; 403		
47:10-48:7	Q; 602; 402; 403		
51:4-6	106		
51:12-23	Q		
54:12-15			
55:3-15	602		
59:25-60:5	Q		
60:18-19			
61:2-13	Q		
62:3-19	Q; 602; 402; 403		
63:2-64:13	Q; 402; 403		
73:6-13			
75:13-77:24	602; Q		
78:2-13	402		
78:24-80:18	Q		
84:17-86:3	Q; 602		
86:19-87:4	403		
91:9-92:11	402; 403		
95:11-23	402; 403		
96:20-97:11	402; 403; Q	97:12-24	
126:1-24	403; Q		
135:25-136:10			
138:10-140:25	402; 403; 106; Q		
142:14-144:13	402; 403		
156:16-22			
157:15-25	Q; 403		
185:12-189:8	Q; 602; 402; 403		
189:14-190:25	402; 403		

PRETRIAL ORDER

EXHIBIT 9

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

Exhibit 9:

Defendants' Deposition Designations for Their Case-in-Chief
Plaintiffs' Objections and Counter-Designations
Defendants' Objections to Defendants' Counter-Designations

Defendants set forth below their deposition designations and their objections to Plaintiffs' counter designations. Defendants reserve the right to amend or supplement their pretrial disclosures, including these designations and objections, as part of the disclosure and meet-and-confer process leading up to trial, in response to Plaintiffs' disclosures and objections, and in response to any pretrial rulings or orders from the Court. Disclosure of any designation does not imply or establish that Defendants will use such designation and does not waive any objections that Defendants may have should Plaintiffs seek to introduce it. Defendants' objection to any Plaintiffs deposition designation does not imply or establish that Defendants cannot use such designations and does not waive Defendants' ability to introduce it.

Key to Defendants' Objections to Plaintiffs' Counter-Designations	
Federal Rules of Evidence & Other Abbreviations	Objection
105	Admissible Only for Limited Purpose or Against Only One Party
106	Incomplete / Remainder of testimony should be considered
402	Not Relevant <ul style="list-style-type: none"> Evidence is inadmissible due to (1) irrelevance or (2) it is relevant but admissibility is precluded by the Constitution, a federal statute, rules of evidence
403	Relevance Outweighed By Other Factors <ul style="list-style-type: none"> Probative value of relevant evidence is outweighed by risk of: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, needlessly presenting cumulative evidence
404	Improper use of character evidence <ul style="list-style-type: none"> Character evidence generally not admissible to prove that person acted in accordance with that character trait on a particular occasion (note that there are exceptions for impeachment and to show bad character)
408	Improper use of Settlement Negotiations Evidence to prove liability or damages <ul style="list-style-type: none"> Offers of compromise and conduct and statements made during compromise negotiations about the claim are not admissible to prove or disprove the validity or amount of a disputed claim
411	Improper evidence regarding Insurance Coverage <ul style="list-style-type: none"> evidence that a person or was not insured against liability is not admissible to prove negligence or wrongful action
501	Privileged
602	Lack of Personal Knowledge or foundation (for fact

Federal Rules of Evidence & Other Abbreviations	Objection
	testimony) under FED. R. EVID. 602, 901, 1002, 1003, 1006.
701	Improper opinion testimony by lay witness <ul style="list-style-type: none"> • not rationally based on witness's perception; • not helpful to clearly understanding the witness's testimony or to determining a fact in issue; • based on scientific, technical, or other specialized knowledge within scope of Rule 702)
702	Improper expert testimony <ul style="list-style-type: none"> • Specialized knowledge isn't helpful to understand the evidence or determine a fact in issue; • Testimony not based on sufficient facts or data; • Testimony not the product of reliable principles and methods; or • Principles and methods not reliably applied to facts of case
703	Expert relied on unreliable data <ul style="list-style-type: none"> • Expert relied on facts/data not reasonably relied on by experts in the field
802	Hearsay <ul style="list-style-type: none"> • Out of court statement being introduced to establish the truth of the matter asserted
901	Lack of Authentication
1002	Original document required (best evidence rule)
FRCP 37	Not timely disclosed as required by discovery rules
NR	Non-responsive testimony
30(b)(6)	Beyond the scope of the FRCP 30(b)(6) designation
Q	Ambiguous, confusing, compound, or leading question; asked and answered; improper attorney argument, testimony, characterization, or repetition, question assumes fact not in evidence. FED. R. EVID. 611(a), 611(c).
MD	Multiple documents. FED. R. EVID. 901, 1003.
N	Improper narrative response

Federal Rules of Evidence & Other Abbreviations	Objection
L	Subject is purely a legal matter. FED. R. EVID. 403, 602, 611(a), 701, 702, 703.
TR	Inadmissible for failure to include a translation or certified translation. FED. R. EVID. 403, 611(a).
MIL	Subject to a motion <i>in limine</i>
MOT	Subject to pending motion - e.g., Daubert motion, SJ motion
ICD	Improper counter designation

Key to Plaintiffs' Objections to Defendants' Designations	
Code	Objection
402	Not Relevant - This testimony is objectionable because it is not relevant to any claim or defense (FRE 402)
403	Confusing and Unduly Prejudicial - This testimony is objectionable because its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence
404	Impermissible character evidence
408	Compromise and offer to compromise (FRE 408)
602	Lack of Personal Knowledge - This testimony is objectionable because it constitutes testimony on a matter as to which the witness lacks personal knowledge (FRE 602)
608	Opinion and Reputation Evidence/Bolstering (FRCP 608(a))
611	Argumentative/Leading (FRCP 611(a); 611(c))
701, AF	Improper Opinion - This testimony is objectionable because it is opinion testimony by a lay witness that is not reasonably based on perception and helpful to a clear understanding of the witness' testimony or the determination of a fact in dispute (FRE 701)
702-705	Inadmissible Opinion (FRE 702-705)
801 and 802	Hearsay - This testimony is objectionable because it is a statement made by one other than the declarant while testifying at trial, offered into evidence to prove the truth of the matter asserted and not subject to any hearsay exception (See FRE 801 and 802)
AA	Asked and answered
AC, WP	Attorney client privilege and/or work product immunity (FRE 501502)
BE, 1002	This testimony is objectionable because it is being used to prove the content of a writing and it is not the original writing (Best Evidence) (FRE 1002)
CS	Calls for speculation
CT	Cumulative Testimony
E	Evidentiary – Assumes facts not in evidence.

Code	Objection
F	Lacks foundation
IA	Incomplete answer or question
IMP	Impeachment - This testimony is objectionable except for use as impeachment
LC	Calls for legal conclusion
MIL	Testimony is the subject of a pending motion in limine
OB	Overbroad/violates Local Rules/Court's Orders
QW	Question withdrawn
V	Vague, ambiguous and misleading

Deponent: James Farrell

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
13:21-24			
15-21:16-6			
20-22:21-3	106, 403	20:20-21	
21:4-11	402, 403	21:12-21	402, 403
21-22:22-2			
39:21-23	106, F, V, 403	38:22-39:20	Q, 402, ICD
40:5-8	106, V, 403	39:24-40:3	Q
41:6-15	CS, V, 403	40:9-41:5	402
41-19:42-2		42:3-11	402
51:20-22	CS, V, 403	51:14-19	
51-25:52-1	CS, V, 403	51:23-24	Q, ICD
52-9:53-11	V, 403	53:12	Q, ICD
53:13-15	V, 403	53:17-22	Q
54:14-15	602		
54-20:55-1	V, 403	55:2	Q, ICD
55:3-18	V, 403	55:19-21	Q, ICD
55-22:56-4			
58:5-6	V, 403	57:17-58:4 58:7-8	Q Q, ICD
58:9-11	V, 403		
60:16-17	V, 403	60:11-14 60:18-19	Q, ICD Q, ICD
60-20:61-8	106, 403	61:9-14	ICD, Q

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
61-15:62-2	106, 403		
62-3:63-4			
67:17-18			
67-23:68-6			
68:22-23	V, 403, Q	68:24-69:1	Q, ICD
69:6-9	106, 403	69:5	Q, ICD, 403
69:14-18			
70:4-23	106, 403	70:24-71:1	
71:2-9	Q, V, 403	71:10-16	Q, ICD
71-19:72-11	V, 403	72:12-13	Q, ICD
72:14-18			
76:19-19	106, 403	76:11-18	Q, ICD, 402
76-25:77-5			
82:16-17	V, 403	82:18-19	Q, ICD
82:20-25	V, 403		
88:8-18			
89:4-13	106, CS, Q, 403	88:19-89:2	Q, 602, NR
89:21-22	106, Q, 403	89:14-20 89:23	602, 403 Q, ICD
89-24:90-9	Q		
97:15-16	Q, 403	97:17	Q, ICD
97:18-22	CS, 403		
100:6-16	V, 403	100:17-18	Q, ICD

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
100:19-24	V, 403	100:25	Q, ICD
101:1-5	V, 403		
103-24:104-8			
104:9-12	106	104:13-16	602
104-17:105-14			
105-17:106-17			
107:12-17	106	107:18-24	602
108:2-14	106	108:15-21	602
108-22:110-14			
110:15-16	V, 402	110:17-18	Q, ICD
110-19:111-24			
112:1-7	V, 403	112:8	Q, ICD
112:9-20			
113:15-21	106, 403, CS	113:11-14 113:22-23	Q, ICD
113:24-25			
114-3:115-1	CS, 403	115:2-3	Q, ICD
115:4-7	CS, 403		
120:6-9	106	118:23-120:5	Q, 402, 403, ICD
121:19-22	V, CS, 403	121:5-18 121:22-24	Q Q, ICD
121-25:122-10			
124-4:125-3			
128:10-12	V, 403	128:13	Q, ICD

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
128:14-25			
129:1-16			
133:12-13	106	133:15-21	
133-22:134-21	106	134:22-24	
136:11-12	V	136:13	Q, ICD
136:14-25			
137-1:138-14			
138:16-16	V	138:15	Q, ICD
138:18-19			
138-21:139-11			
144:15-16	106, CS, V, 403	144:6-13 144:17-18	701, Q, 602 Q, ICD
144:21-21			
148:12-12	106,701	148:13-15	Q, ICD
148-16:149-2	501	149:5-7	Q, ICD
149:10-13	701	149:14-15	Q, ICD
149:16-22			
151:8-13	V		
161:2-3			
161:8-16			
162-24:163-2	106	163:4-7	602
163:8-18			
171-18:172-1			

Defendants’ Designation	Plaintiffs’ Objections	Plaintiffs’ Counter- Designation	Defendants’ Objections
173:12-14			
175-9:176-10	V, 403	176:11	Q, ICD
176:12-20	CS, 403	176:21-22	Q, ICD
176:23-25	CS, 403		
177-25:179-1			
192-22:193-1	Q, V, 403	193:2-3	Q, ICD
193:15-19	V, 403	193:13-14	Q, ICD
194:18-23	701	194:24-195:3	Q, ICD
195:4-12			

Deponent: Andrew Geppert

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
12-12:13-2			
13-24:14-8			
16:3-14	402; 403		
17-13:18-1			
18:12-23	106	18:24-19:4	
19:5-15	106	19:16-25	
20:1-6	106	20:7-14	
20-15:21-15			
23:11-16	106; 402; 403	23:23-24:6	
23:19-21	106; 402; 403	23:23-24:6	
24:7-10	106; 402; 403		
24:12-23	106; 402; 403	24:24-25:1	602, 402
25:2-11	402; 403; Q; V		
26:12-18	402; 403; Q; 602; 802	26:19-21	
28:11-18			
31-23:32-8	106; 402; 403; Q; V; 901		
32:13-24	402; 403	32:25-33:1 33:4-7 33:9	602 602 602
34:3-14	402; 403; 901		
34:22-25	402; 403; Q; V		

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
35:2-21	402; 403; 901; Q; V	36-9-12	
36-15:37-15	402; 403; 901	37:16-20 37:22-38:8 38:11-17 38:20 38:22-39:1	602 602
39:2-2	402; 403; Q; V	39:8-13 39:15-40:1	
39:5-6	106; 402; 403; Q; V	39:8-13 39:15-40:1	
40:5-8	402; 403; 901		
40-13:41-6	402; 403; 901	41:18-42:3	
42:4-22	402; 403; 901; L		
44-18:45-5	402; 403; 901; Q; L; V		
45-6:46-4	402; 403; 901; Q; L; V		
48:12-13	402; 403; 106; Q; V		
48:15-16	402; 403; 106; Q; V		
48-24:49-2		49:3-4 49:6-10	
49:12-22	106	49:23-50:17 50:19-51:21 52:2-54:19	402, 403 402, 403 Q, NR
54-21:55-4	402; 403; 106;		

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
	Q; V		
55:6-11	402; 403; 106; Q; V		
57:7-15	402; 403; 901; 106; 602	57:16-20	602
57-21:58-9	402; 403; 901; Q; V		
58-23:59-19	402; 403; 901		
59-20:60-12	402; 403; Q; V		
61:4-10	402; 403		
66:4-6	402; 403; 106; Q; V		
66:8-10	402; 403; 106; Q; V	64:11-14 64:17-24 68:4-6 68:8-69:17 70:4-71:10	ICD ICD, NR ICD ICD, 602 ICD, 602, 402, 403
82:4-13	402; 403; 602; 901		
83:11-18	402; 403; 602; 901; Q; V		
83-20:84-1	106; 402; 403; 602; 901; Q; V	84:3-5	402
84:6-12	402; 403; 602; 901; Q; V		
84-14:85-1	602; 901		
85:7-9	106; Q; V		

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
85-18:86-3	106; Q; V		
103-21:104-9	106; 402; 403; 602; 901; Q; V		
104:11-17	106; 402; 403; 602; 901; Q; V		
104-18:105-13	106; 402; 403; 602; 901; Q; V		
105:14-14	106; 402; 403; 602; 901; Q; V		
105:15-16	106; 402; 403; 602; 901; Q; V		
105-23:106-3	106; 402; 403; 602; 901; Q; V		
106:9-12	106; 402; 403; 901; Q; V		
106:15-23	402; 403; Q; V		
106-25:107-5	106; 402; 403		
107:6-8	106; 402; 403		
112-10:113-2	402; 403; 602; 901; Q; V		
114:22-23	106; 402; 403; Q; V		
114-25:116-6	106; 402; 403; 701	116:7-18	
116:19-25	106; 402; 403		
117-10:118-4	106; Q; V	118:5-14 118:16-120:14	106

Defendants’ Designation	Plaintiffs’ Objections	Plaintiffs’ Counter-Designation	Defendants’ Objections
120-21:121-4	106; 402; 403; 901; Q; V		
121:13-22	106; 402; 403; 901; Q; V		
121-24:122-17	106; 402; 403; 901; Q; V		
122-23:123-6	106; 402; 403; 901; Q; V		
123-8:124-8	106; 402; 403; 901; Q; V		
124-11:125-7	106; 402; 403; 901; Q; V		
125:9-15		125:17-126:23	ICD, 402
128-21:130-8	402; 403; Q; V		
130:10-13	602		
130-15:131-6	602; 901; Q; V; CS		
131:9-19	602; Q; V		
132:9-23	602; Q; V; CS		
133:1-8	602; Q; V; CS		
134:1-21	402; 403; 602; 702; 901	134:22-135:9	
136-24:137-18	402; 403; Q; V; CS		
138-20:139-4	602; 901	139:5-140:21	
140:22-25	402; 403		

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
144-3:145-1	402; 403; 602; 901		
145:5-8	106; 402; 403; 602; 901; Q; V; CS		
145:11-25	106; 402; 403; 602; 901; Q; V; CS		
146:3-3		148:4-17 149:14-18	106, ICD, NR 106, ICD, NR
150-20:151-17	402; 403; Q; V		
151:24-25	106; Q; V		
152:3-18	106; Q; V		
152-21:153-12	402; 403		
155:5-7	Q; V; L		
155:10-20	402; 403; Q; V; L		
155-23:156-3	402; 403		
156-12:157-12	106; 402; 403; Q; V		
157-15:158-9	402; 403		
162-1:163-4	106; 402; 403; 602; 901; Q; V		
163-6:164-9	106; 402; 403; 602; 901; Q; V		
164:12-19	106; 402; 403; 602; 901; Q; V		

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
165:3-8	106; 402; 403; 602; 901; Q; V		
165-9:166-21	106; 402; 403; 602; 901; Q; V; CS		
166-24:167-4	402; 403; 602; 901		
167-6:168-2	402; 403; 602; 901; Q; V	185:13-16	ICD
212-22:215-25	402; 403; 602; 901; Q; V	216:1-3 216:6-217:15	NR

Deponent: Dinsh Guzdar

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
10:18-25			
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17:12-17			
18:1-10	106	17:18-25	Q, ICD, 403
18:11-21			
18:22-24	V	18:25-19:1	Q, ICD
19:3-7			
19:8-13			
19:14-16	V	19:17	Q, ICD
19:18-22	V	19:23	Q, ICD
19-24:20-20	V, LC, 701	20:21	Q, ICD
20-24:21-1	LC, 701		
21:2-10			
21-25:22-12	AA		
23:18-21	QW		
23:23-24	QW, 403		
24:1-14	E, 402, 403	24:15-16	Q, ICD
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24:20-22	CS, V, 106	24:23-25:24	Q, NR
27:13-15	E, 403,402	27:16-19	Q, ICD, 106

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28:11-18	106	28:19-20	
28-21:29-21	402, 403, E	29:22-23	Q, ICD
29-24:30-3	V, 402, 403	30:4-5	Q, ICD
30:6-11	V	30:12-14	Q, ICD
30:15-18	V	30:19-20	Q, ICD
30-21:31-18	V, AA	31:19	Q, ICD
31-20:32-4			
32:5-8	V	32:9-10	Q, ICD
32:11-19			
32:20-23	E, 403	32:24-25	Q, ICD
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33:5-13			
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34:9-14	Q		
34-17:35-7			
35:8-25			
36:18-23			
38:8-10			
38-11:39-8	V	39:9	Q, ICD
39:10-22	V, Q	39:23-24	Q, ICD
39-25:40-19	AA		
41:11-20	402		

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43:7-13			
44:8-17	CS	44:18-22	Q, ICD
44-23:45-23			
46:4-5	V	40:6	ICD
46:7-15	V	46:16-17	Q, ICD
46-18:47-8	V	47:9	Q, ICD
47-10:48-24	V, AA	48:25	Q, ICD
49:1-2			
50:10-20	AA	50:21-22	Q, ICD
50-24:51-11	Q, E, 403	51:12	Q, ICD
51:13-14	106	51:16-22	402, 403, NR, 602
52:3-16			
54:11-20	106	54:1-10	
55-8:56-19			
57-23:58-5	501, 403	58:6-17	Q, ICD
58:18-19			
59:20-24			
60-9:61-2	AA, 106	60:7-8; 61:3-4	ICD, 106 Q, ICD
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65:4-6			
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65-25:66-9	V	66:10	Q, ICD

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66:12-13	Q, V	66:14-15	Q, ICD
66-16:67-3	V	67:4-5	Q, ICD
67:6-16	AA	67:17-18	Q, ICD
67:19-23	AA	67:24	Q, ICD
67-25:68-4	AA	68:5-6	Q, ICD
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68-23:69-4	E, 403, V, F		
75:6-15			
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78-7:79-1	V	79:2-3	Q, ICD
79:4-8	V, AA	79:9-10	Q, ICD
79:12-17	V	79:18-19	Q, ICD
79-20:80-15	501, 403	80:16-18	Q, ICD
80-20:81-11	E, Q, 403	81:12-13	Q, ICD
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86:12-15	V	86:16	Q, ICD
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106:6-6			
106-10:107-6	V	107:7	Q, ICD
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115:4-15	V	115:16	Q, ICD
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116-22:117-1	V, CS	117:2-3	Q, ICD
117:4-10	V	117:11	Q, ICD
117:12-15	V	117:16	Q, ICD
117-17:118-2			
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133:4-4			
133:9-20	106	133:21-134:7	
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136-17:137-1	CS	137:2-3	Q, ICD
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143-24:144-1	AA	144:2-3	Q, ICD
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144-20:145-6			
148:9-22	CS	148:23	Q, ICD
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149:7-24	CS		
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160-23:161-4	106	161:5-7	
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176:1-7	CS		
191-25:192-12	106	192:13-17	402
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Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter- Designation	Defendants' Objections
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204:1-11			
205-22:206-13			
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Deponent: Thomas Kramer

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
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187-21:188-5	CS, F		
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Deponent: Kevin Malchoff

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3:18-20	402		
4-18:5-2	106, IA	4:13-17	Q, ICD
5-15:6-13	402		
6:19-19	402		
7-2:8-4	106, IA		
9:16-21	106, IA	9:15	ICD
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11-22:12-10	402, CS, F, 602		
14-24:15-8	V		
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67:8-10			
68-21:69-9			
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75-10:76-11	Q, CS		
79-21:80-5	Q, V		
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82-20:83-12	402, 30(b)(6)	83:13-18	Q, ICD
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98:13-20	Q		
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108:22-23	402		
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164:4-17	CS, 602		
171:12-17	CS,602		
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Deponent: Jens Voges – 30(b)(6)

Defendants’ Designation	Plaintiffs’ Objections	Plaintiffs’ Counter-Designation	Defendants’ Objections
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15:13-15			
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20:8-17			
20-23:21-2			
22:1-16	106	22:17-22	
22-23:24-5	106	24:6-14	402
26:9-17	106	26:18-27:6	
27:7-8	V, 403	27:9	Q, ICD
27-10:28-1	403, E, 703, 105; 30(b)(6)	28:2-8	Q, ICD, 402, 403
29-7:30-5	F		
30-21:31-6			
31:7-10	V, AA, Q, 403	31:11-12	Q, ICD
32-21:33-20	V, AA, Q, 403	32:15-20	Q, ICD, 403
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36-25:37-4	AA		
40:13-18	106	40:19-41:1	402, 403
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Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
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55:20-20	F, 106	55:21-56:1	Q, ICD, 403
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57:24-25	V, 403	58:1-2	Q, ICD
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63-19:64-7	106	63:3-18	ICD
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68:15-17	V	68:18	Q, ICD
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73-16:74-15	V	74:16	Q, ICD
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74:21-23	106	74:24-75:4	Q, ICD
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79-23:80-1	30(b)(6), CS, V, 403		
86-20:87-2	F, V, 702, 30(b)(6), 403	87:3-88:8	Q, ICD
90-25:91-4			
95:9-18	403, CS, E, 106	95:19-96:1	

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101-3:102-6	802, V	102:7	Q, ICD
102:9-20			
105:2-20	30(b)(6), 403		
108-21:109-5	106, AA, 702	109:6-17	
119-25:120-3			
120:12-25	LC, 702		
122:9-11	V, 702, 403	122:12	Q, ICD
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126:2-6	30(b)(6), 702, 403	126:7-17	
126:18-19	V	126:20	Q, ICD
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129-17:130-2	106, 30(b)(6), 702	130:3-13	
132:16-18	V	132:19-20	Q, ICD
132-21:133-1	V	133:2	Q, ICD
133:3-9			

Defendants' Designation	Plaintiffs' Objections	Plaintiffs' Counter-Designation	Defendants' Objections
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135:1-5			
135:13-15	A	135:16-17	Q, ICD
135-18:136-6	IA, 403	136:7-9	Q, ICD
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143-15:144-10	106, 30(b)(6), 702, 801, 404	144:11-145:5	Q
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152-25:153-6	LC, CS, 403, 702	153:7-8	Q, ICD
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167-19:168-11	LC, 403, 30 (b)(6)		

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174:2-14	501, LC, 403		
174-15:175-1	501, LC, 403, 106	175:2-4	

PRETRIAL ORDER

EXHIBIT 10

Plaintiffs' Trial Exhibit List

Prov. Exhibit #	Description	Date	Bates	Deposition	Defendants' Objections
1	Copy of Ribbonded Farrell Patent 5,803,377	09/08/1998			403
2	Copy of Ribbonded Farrell Patent 7,144,150	12/05/2006			403
3	Copy of Ribbonded Farrell Patent 7,520,662	04/21/2009			403
4	Copy of Ribbonded Farrell Patent 7,530,658	04/02/2009			403
5	IPR Reexamination Certificate Patent 5,803,377	03/30/2018			403
6	2002-04-12 Annotated Kablooe Meeting notes	04/12/2002	FREAL 000583-588		
7	2009-03-27 HBB Business Case Summary 3/27/09 REDACTED - Phase 3 Blend in Cup - Cornelius	03/27/2009	HBBF0013063-071	BrianPWilliams_1	403; 1002
8	2009-03-27 HBB Business Case Summary 3/27/09 UNREDACTED - Phase 3 Blend in Cup - Cornelius	03/27/2009	HBBF0171457-465		
9	2009-11-12 License Term Sheet Hamilton Beach and f'real	11/12/2009			403
10	2010-01-05 Handwritten notes and spreadsheet re f'real Product Development; Blade Design; Water Addition; Cup Holder	01/05/2010	HCC001354-356	BrianPWilliams_14	403; 602; MD
11	2010-01-05 Handwritten Notes titled F'real Product Development Schedule	01/05/2010	HCC_001354	ZacharyWaite_8	403
12	2010-10-28 Bilateral Confidentiality Agreement between Hamilton Beach and Hershey Creamery	10/28/2010	HCC 000336		
13	2010-11-03 email from O'Flynn to Waite re hello from hershey	11/03/2010	HBBF0039719-720	BrianPWilliams_15	403
14	2010-11-08 Ryan email to Holder re shake cups - Hershey Creamery	11/08/2010	HCC 004735-736	ZacharyWaite_20	402; 403; 802
15	2010-11-09 email from Waite to O'Flynn re shake	11/09/2010	HBBF0037084-085	BrianPWilliams_16	402; 403
16	2010-11-11 email from O'Flynn to Williams re Machine inside	11/11/2010	HBBF0023153-154	BrianPWilliams_17	403
17	2011-01-03 email from Ryan to Holder re Shake cup and Filler Notes	01/03/2011	HCC003028		402; 403; 802
18	2011-01-31 email from Waite to O'Flynn re Proposed Hershey's Cup overall dimensions	01/31/2011	HBBF0054451-452		402; 403
19	2011-02-01 HBB Business Case Summary - 1 Year Assessment Due - Hershey's Ice Cream - Mix in Cup	02/01/2011	HBBF0013112-118	BrianPWilliams_8	403
20	2011-02-10 email from Waite to Holder re Pre-made shake pricing	02/10/2011	HCC 004759-760	ZacharyWaite_39	402; 403
21	2011-02-25 email from Wood, Farrell and Hartley re Hamilton Beach and F'Real Discussion Followup (UNREDACTED)	02/25/2011	HBBF0000624-628		402; 403
22	2011-03-16 email from O'Flynn re Wawa - Target for Blend in Cup / Mix in Cup?	03/16/2011	HBBF0096306	HenryRWood_20	402; 403
23	2011-08-02 Hamilton Beach Termination Letter	08/02/2011	HBBF0000685		402; 403
24	2011-08-18 email from O'Flynn to Waite re price	08/18/2011	HBBF0041236-237	HenryRWood_11	403
25	2011-10-12 email from O'Flynn to Williams re f'real Self Service Blend-in-Cup (with attachment)	10/12/2011	HBBF0022908-912	BrianPWilliams_23	402; 403
26	2013-11-15 email from Blackmon to Waite re Sse leads	11/15/2013	HCC 018772-874	ZacharyWaite_38	402; 403
27	2013-12-12 email from Waite to Holder re Freal info	12/12/2013	HCC 005271-273	ZacharyWaite_45	402; 403; 802
28	2014-07-15 email from Kimball to Preston and Waite re SSE Double	07/15/2014	HCC 009925-932	ZacharyWaite_46	402; 403; 802
29	2016 NPD Report-State of the Industry December	12/2016	FREAL 235643-661		402; 403; 602; 802; 901
30	2017-05-15 email from Chambers to Foster re cups per year since 2000 (REDACTED)	05/15/2017			402; 403; 802; 901; MD; MIL
31	2017-07-06 email from Chambers to Foster re Additional f'real cup sales back-up documentation	06/07/2017			402; 403; 802; 901; MD; MIL
32	CSP - Categaory Management Handbook 2016	2016	FREAL 005623-782		402; 403; 602; 802; 901
33	Federal Express Delivery documents 2002-10-04	10/04/2002	KABLOOE 000018-021		MD
34	Financial Chart of BIC and MIC sales 2013-2017	2013-2017	HBBF0013235		
35	f'real annual gross revenue and cup volume sales - 2002 through 2016	2002-2016			403; 602

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36	f'real University Leasing Program	Undated	HCC005272-273		403
37	Hershey Marketing document Kashim Adams	Undated	HCC 006147	ChuckPreston 9	402; 403
38	Presentation entitled, "Welcome all you 'new' f'realies!"	Undated	FREAL 235591-618		
39	SmartServe Operation Manual	11/2013	HBBF0000023-032	BrianPWilliams 10	
40	Source Commercial Success Charts	2016			402; 403; 106
41	Spreadsheet; f'real business lost to Hershey	Undated		MichaelPAkemannPhD 8	106; 403; 802; 901
42	Supplemental Declaration of Jens Voges Concerning Secondary Considerations - with redactions	03/29/2017			MIL; 402; 403; 602; 802; 901
43	Prosecution History of Patent 5,803,377	Undated	FREAL 001084-236		
44	Prosecution History of Patent 7,144,150	Undated	FREAL 001237-374		
45	Prosecution History of Patent 7,520,658	Undated	FREAL 001375-538		
46	Prosecution History of Patent 7,520,662	Undated	FREAL 001539-733		
47	Farrell United States Patent 5,962,060	10/05/1999		AlexanderRaring 2	
48	US Provisional Patent No 60426622 -662	11/15/2002			
49	IPR Case 00756-Decision Denying Institution of IPR of Patent 7,144,150 - 2017-07-21	07/21/2017			402; 403; MIL
50	IPR Case 00765-Decision Denying Institution of IPR of Patent 7,520,658 - 2017-07-31	07/31/2017			402; 403; MIL
51	IPR Case 01105 - Decision Denying Institution of IPR of Patent 7,520,658 - 2016-11-30	11/30/2016			402; 403; MIL
52	UNREDACTED Final Written Decision Case No. IPR 2016-01107 Patent 7,520,662 - 2017-12-19	11/07/2017			402; 403; MIL
53	Declaration of Jens Voges re Patent 5,803,377 Reexamination 2017-06-07	06/07/2017			402; 403; 602; 802; 901
54	Notice Of Intent To Issue Ex Parte Reexamination Certificate, Ex Parte Reexamination of U.S. Patent No. 5,803,377 - 2017-12-20	12/20/2017			402; 403
55	Patent Assignment Abstract of Title U.S. Patent No. 5,803,377	Undated			402; 403; 602; 802; 901; 1002
56	Patent Assignment Abstract of Title U.S. Patent No. 7,144,150	Undated			402; 403; 602; 802; 901; 1002
57	Patent Assignment Abstract of Title U.S. Patent No. 7,520,658	Undated			402; 403; 602; 802; 901; 1002
58	Patent Assignment Abstract of Title U.S. Patent No. 7,520,662	Undated			402; 403; 602; 802; 901; 1002
59	Recorded Assignment from Farrell to f'real U.S. Patent No. 7,144,150	10/04/2005			
60	Recorded Assignment from Farrell to f'real U.S. Patent No. 7,520,662	10/04/2005			
61	Recorded Assignment from Farrell to f'real U.S. Patent No. 7,580,377	09/22/1998			
62	Recorded Assignments from f'real to Rich	02/24/2016			
63	Recorded Assignments from Rich to f'real	02/24/2016			
64	Patent Maintenance Fee Details	03/06/2019			
65	Farrell U.S. Patent No. 4,297,813	11/03/1981			402; 403
66	f'real PONY Patent Application	05/17/2018	FREAL 24511-146		402; 403
67	f'real U.S. Patent Application 2018/0132663 (B6 Blender)	05/17/2018			402; 403
68	Hershey copy of Farrell U.S. Patent No. 6,465,034	10/15/2002	HCC 0000528-551	ZacharyWaite 30	402; 403
69	Reissued Patent US RE45,178 Hamilton Beach	10/07/2014			402; 403
70	Spindle mixer with interlock assembly - Summary of U.S. Patent Re 45,178	06/14/2012			402; 403; 901; 1002
71	Williams U.S. Patent Application 2012/0087203	04/12/2012		AlexanderSlocum 37	
72	2002-05-15 Farrell/Kablooe handwritten notes; drawings	05/15/2002	FREAL 000642-648		901
73	2003-06-18 Prototype Tracking Notes	06/16/2003	FARRELL000004.0052		
74	2010-10-26 Patent License Agreement	05/26/2010	HBBF0000651-665		

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75	2011-01-05 "Proposed Agenda"	01/05/2011	HCC000351	HenryRWood 9	402; 403
76	2011-08-10 Hamilton Beach/Cornelius Development, Technology, and Supply Agreement	08/10/2011	HBBF0120268-304		
77	2011-09-16 Amendment to Hamilton Beach/Cornelius Development, Technology and Supply Agreement	09/16/2011	HBBF0120251	GregHTrepp_15	
78	2012-04-27 Letter to Hamilton Beach from f'Real Foods re f'real sale	04/27/2012	HBBF0120027-029	GregHTrepp 9	
79	2014-01-29 Hamilton Beach/Hershey Purchase and Distribution Agreement	01/29/2014	HCC_026017-030	GeorgeHolder_10	
80	2014-04-03 Hamilton Beach Meeting Agenda	04/03/2014	HCC 000244-245	ZacharyWaite 10	402; 403
81	2014-06-17 Hershey meeting agenda	06/17/2014	HBBF0010810-813	AnnMarieBlackmon_12	402; 403
82	2016-02-26 GM44 Product Disclosure - updated	02/26/2016	HBBF0014796-980		402; 403
83	2017-02-22 GM44 Request for Quotation with drawings	02/22/2017	HBBF0014772-782		402; 403
84	2010-01-21 HBB Business Case Summary - Blend in Cup - Stand Alone	01/21/2010	HBBF0013037-044	BrianPWilliams 6	403
85	2010-06-03 HBB Business Case Summary - Mix in Cup - Stand Alone	06/03/2010	HBBF0013051-057	BrianPWilliams 7	403
86	2014-02-04 HBB Business Case Summary - Phase 1 - Mix in Cup Gen 2, Auto Sanitize & Display	02/04/2014	HBBF0019713-718		403
87	2014-12-02 HBB Business Case Summary 12/2/14 re Dairy Queen	12/02/2014	HBBF0013240-250	HenryRWood 23	403
88	f'real B2 promotional video	Undated	FREAL 245084		403; 602; 901
89	f'real B4 promotional video	Undated	FREAL 245085		403; 602; 901
90	f'real B4 promotional video	Undated	FREAL 245086		
91	f'real B4 promotional video	Undated	FREAL 245087		
92	f'real B4 promotional video	Undated	FREAL 245088		403; 602; 901; 802
93	Shake Shop Express promotional video	Undated	FREAL 245076		
94	Shake Shop Express promotional video	Undated	FREAL 245077		
95	Shake Shop Express promotional video	Undated	FREAL 245078		
96	Shake Shop Express promotional video	Undated	FREAL 245079		
97	Shake Shop Express promotional video	Undated	FREAL 245080		
98	Shake Shop Express promotional video	Undated	FREAL 245081		402; 403; 602; 901
99	Shake Shop Express promotional video	Undated	FREAL 245082		403; 602; 901; 802
100	Shake Shop Express promotional video	Undated	FREAL 245083		
101	Shake Shop Express Video TheCloseV2a.mp4 (Retained by Counsel)	Undated		ChuckPreston 7	403
102	Video - Cutaway cup showing MIC2000 shaving 29 secs	Undated	FREAL_245098		MIL, MOT; 402; 403; 602; 901; FRCP 37
103	Video - slo-mo video of MIC2000 shaving in cutaway cup 43 secs	Undated	FREAL_245099		MIL, MOT; 402; 403; 602; 901; FRCP 37
104	Video of cutaway cup showing Hershey shaving - 10 secs	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37
105	Video showing Hershey shaving - 43 secs	Undated	FREAL_245099		MIL, MOT; 402; 403; 602; 901; FRCP 37
106	Video showing splash shield weight dropping under own weight - 3 secs	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37
107	Video showing splash shield weight moved by hand - 5 secs	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37
108	Photo Farrell garage	Undated			
109	Photo f'real milkshakes	Undated			402; 403; 602; 901
110	Photo from MIC2000 Shaving 22.mov	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37
111	Photo from MIC2000 Shaving 22.mov	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37

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112	Photo from MIC2000 Shaving 22.mov	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37
113	Photo Maynes Report - B2 blender	Undated			
114	Photo Maynes Report - B4 blender	Undated			
115	Photo Maynes Report - B6 blender	Undated			
116	Photo Maynes Report - HB blender splash shield weight	Undated			
117	Photo Maynes Report - HB blender wash chamber door (drawing)	Undated			106
118	Photo Maynes Report - HB MIC2000 blender rinse nozzles	Undated			
119	Photo of four Hershey cups and mixtures	Undated			MIL, MOT; 402; 403; 602; 901; FRCP 37
120	Photo of Hamilton Beach circuit boards	Undated	HBBF0002229-230	BrianPWilliams 42	
121	Photo of Hamilton Beach project managers and engineers	Undated	HBBF0005186		402; 403
122	Photo of lower portion of the MIC2000 splash shield	02/28/2014	HBBF0000332	BrianPWilliams 41	
123	Photo of Shake Shop Express on site	Undated	HBBF0010844	BrianOFlynn 5	
124	Photo Traditional Fast Food Milkshake Preparation - image 1	Undated			402; 403; 602; 901
125	Photo Traditional Fast Food Milkshake Preparation - image 2	Undated			402; 403; 602; 901
126	Photos of HB blade assembly	06/09/2014	HBBF0000322-329	BrianPWilliams 40	
127	Café Zero Facebook Page - Top of Page with Photo	Undated			
128	One Shot Website	Undated			
129	One-Shot Website - One-shot Ice Cream Corporation Soft Serve Ice Cream Machines	Undated			
130	Screenshots from Hershey YouTube Demonstration Videos with 7,520,662 claim 21 (https://youtu.be/-h7D9d9-S5M?t=37)	12/12/2018			402; 403; 602; 901; 701; 702; 1002
131	Screenshots from Shake Ship Express video criticizing f'real	Undated		ChuckPreston 8	402; 403; 1002
132	Screenshots of KABLOOE 02873 (Kablooe animation video)	Undated			402; 403; 1002
133	2002-05-13 email from Geppert to Farrell re Progress Notes from Ideation Phase	05/13/2002	FARRELL003187-188		
134	2002-05-22 email from Farrell to Geppert Kramer evaluating Ideation sketches	05/22/2002	FREAL_000649-662		
135	2002-05-23 email from Farrell to Geppert - a little more	05/23/2002	FREAL 000634		
136	2002-06-13 email from Farrell to Geppert - Concerns	06/13/2002	FREAL 000743-744		
137	2002-09-02 email from Farrell to Gray (Prince Castle) re f'real Milkshake Mixer	09/02/2002	FARRELL003052-053		402; 403; 802
138	2010-02-10 email from Branson to Anderson re Blender seal leaking - aeration	02/10/2010	HBBF0020103		402; 403; 802
139	2010-03-01 email from Wood to O'Flynn re Follow Up for Costa	03/01/2010	HBBF0100540		402; 403; 802
140	2010-03-15 email from Sykes to Wood re Agreements (TM Rights Modification)	03/15/2010	HBBF0107220-223		402; 403; 802
141	2010-05-26 email to Dan Gallagher and Jim Taylor re F'real Agreement signoff	05/26/2010	HBBF0101671	GregHTrepp_4	402; 403
142	2010-07-14 email from O'Flynn to Williams re Taco Bell stores with our machine on test	07/14/2010	HBBF0023158-160	BenBranson_6	
143	2010-10-07 email from Wood to Betz re Possible visitor at NACS booth	10/07/2010	HBBF0105776	HenryRWood 4	402; 403
144	2010-10-07 email from Wood to Hartley re checking in	10/07/2010	HBBF0001344-346	HenryRWood 5	
145	2010-10-08 email from Wood to Reed re Update from Cornelius	10/08/2010	HBBF0077651-652	HenryRWood 6	402; 403; 802
146	2010-10-20 email from Jason Reed to O'Flynn re Hamilton Beach Drink Mixers & Blenders	10/20/2010	HBBF0096237-238		402; 403; 802
147	2010-11-11 email from Hank Wood to Cornelius re Customers for Blend-in-Cup & Agreement	11/11/2010	HBBF0105799	HenryRWood_7	402; 403; 802

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148	2010-11-12 email from Butler to Waite re Cups (freal thickness)	11/12/2010	HCC 002986-988	ZacharyWaite_21	402; 403; 802
149	2010-11-14 email from Butler to Waite and Preston re Hershey's Milkshake (F'Real Lable)	11/14/2010	HCC_002986-755	ChuckPreston_1	402; 403; 802
150	2010-11-14 email from Butler to Waite re Hershey's Milkshake	11/14/2010	HCC002985-987		402; 403; 802
151	2010-12-15 email from O'Flynn to Wood re Hershey's Ice Cream - Visit Jan 4th / 5th	12/15/2010	HBBF0019905	HenryRWood_8	402; 403
152	2010-12-15 email from O'Flynn to Wood re Hershey's Ice Cream - Visit Jan 4th /5th	12/15/2010	HBBF0019904	BrianPWilliams_18	402; 403
153	2010-12-17 email from Butler to Waite re Shake Cup Art	12/17/2010	HCC002998-002		402; 403; 802; MD
154	2010-12-20 email from O'Flynn to Waite re Hamilton Beach Project	12/20/2010	HBBF0039690-691	BrianPWilliams_19	
155	2010-12-23 email from Waite email to Keeney re Hershey Shake Progress	12/23/2010	HCC 000380-383	ZacharyWaite_17	MD
156	2010-12-29 email from O'Flynn to Wood re Hershey's Visit to HB	12/29/2010	HBBF0096786-788	BrianOFlynn_1	
157	2010-12-30 email from O'Flynn re Hershey tour	12/30/2010	HBBF0022789	HenryRWood_10	
158	2011-01-03 email from Ryan to Holder re Shake cup and Filler Notes	01/03/2011	HCC 004738-739	ZacharyWaite_22	402; 403; 802
159	2011-01-03 email from Williams to Pryor Branson re f'real (with F'Real Brochure)	01/03/2011	HBBF0023161-175	BenBranson_8	402; 403
160	2011-01-07 email from Wood to Will Hartley at f'real (UNREDACTED)	01/07/2011	HBBF0000629-633		402; 403
161	2011-01-16 email from Holder to Waite - IMG00295-2010112-1426.jpg (f'real machine)	01/16/2011	HCC 004750-752		402; 403
162	2011-01-16 email from Holder to Waite re IMG00295-2010112-1426.jpg of f'real machine	01/16/2011	HCC 004748-749		402; 403
163	2011-01-20 O'Flynn email to Waite re legal issue	01/20/2011	HCC 025475-476	ZacharyWaite_26	402; 403; 802
164	2011-01-23 email from Kevin Gold (Rhoads-Sinon) to Alex Raring re Hershey Creamery Company	01/23/2011	HCC_025476	AlexanderRaring_3	402; 403; 802
165	2011-01-31 email from Branson to Waite re Proposed Hershey's cup overall dimensions	01/28/2011	HCC_025082-083	BenBranson_9	402; 403; 802
166	2011-02-07 email from Waite to Holder re Milkshake estimate sheet (attached spreadsheet)	02/07/2011	HCC_021481-482	GeorgeHolder_7	402; 403
167	2011-02-07 email from Waite to Holder re Milkshakes-Costing and Sales estimators (attached spreadsheet)	02/07/2011	HCC_004756-757	GeorgeHolder_6	402; 403
168	2011-02-17 email from Alex Raring to Hank Wood re Feedback on F'REAL's Comments	02/17/2011	HBBF0050306-308	AlexanderRaring_4	402; 403; 802
169	2011-02-23 email from Scharlau to Holder re freal	02/23/2011	HCC 019089	GeorgeHolder_5	402; 403; 802
170	2011-02-24 email from Arron Bryant to Williams re GM42 Commercial Blending Mixer (response to questions)	02/24/2011	HBBF0045541-550	BrianPWilliams_21	402; 403; 802
171	2011-02-25 email from Hank Wood to Farrell re Hamilton Beach and f'real Discussion Follow Up	02/25/2011	HBBF0000619-623	HenryRWood_19	402; 403
172	2011-02-25 email from Wood, Farrell and Hartley re Hamilton Beach and F'Real Discussion Followup (REDACTED)	02/25/2011	HBBF0000624-628		402; 403; 1002
173	2011-03-11 email from Waite to O'Flynn and Branson re "Final" Cup	03/11/2011	HBBF0053827-830	ZacharyWaite_24	402; 403
174	2011-03-11 email from Waite to Ryan and Holder re Cup Options	03/11/2011	HCC 021483-486	ZacharyWaite_25	402; 403; 802
175	2011-03-22 email from Waite to Branson re CAD drawings of cups	03/17/2011	HCC 021492-495	BenBranson_11	402; 403; 802
176	2011-03-23 email from Zachary Waite to Brian O'Flynn re Mixin Cup - Status Update	03/23/2011	HCC_021498-499	AlexanderRaring_5	402; 403; 802
177	2011-03-28 email from Kevin Gold to Rarin, Waite, and Holder re Hershey Creamery	03/28/2011	HCC_026755	GeorgeHolder_24	402; 403; 802
178	2011-03-28 email from Raring to Gold re MIC2000 drawings	03/28/2011	HCC 026744-745	ZacharyWaite_27	402; 403; 802
179	2011-04-14 email from Kevin Gold to Alex Raring re Hershey Creamery	04/14/2011	HCC 026746-747	AlexanderRaring_7	402; 403; 802
180	2011-06-08 email from O'Flynn to Waite re f'real patents	06/08/2011	HCC 025543	ZacharyWaite_28	402; 403; 802

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181	2011-06-16 email from Hooker & Habib to Raring re Hershey Creamery, Hamilton Beach Blender, Attorney's Case No. 1-1529	06/16/2011	HCC_026756	ZacharyWaite_31	402; 403; 802
182	2011-07-01 email from Raring to Waite re Mix / Blend in Cup info	07/01/2011	HCC 026761-763	ZacharyWaite_32	106
183	2011-07-05 email from Waite to Holder re f'real payments	07/05/2011	HCC 026748-750	ZacharyWaite_33	402; 403; 802
184	2011-07-06 email from Hooker & Habib ro Raring re Mix/Blend in Cup Info, Attorney's Case No. 1-1529 (REDACTED)	07/06/2011	HCC 026770-772		402; 403; 802
185	2011-07-06 email from Raring to Hooker & Habib - Mix/Blend in Cup Info Attorney's Case No. 1-1529 (REDACTED)	07/06/2011	HCC 026767-769		402; 403; 802
186	2011-07-06 email from Raring to Hooker & Habib re Mix/Blend in Cup Info, Attorney's Case No. 1-1529	07/06/2011	HCC_026767-769	AlexanderRaring_10	402; 403; 802
187	2011-08-01 email from Waite email to O'Flynn re Update on Mix in Cup - Hershey's Ice Cream	08/01/2011	HBBF0054393-394	ZacharyWaite_35	402; 403; 802
188	2011-08-03 email from Waite to Holder re HB meeting 2pm	08/03/2011	HCC000189-190	BrianOFlynn_3	402; 403; 802
189	2011-10-11 email from Branson to O'Flynn - Hershey's Ice Cream - Mix in Cup Feedback	10/11/2011	HBBF0048744-747	BrianPWilliams_22	402; 403; 802
190	2011-10-11 email from O'Flynn re Hershey's Ice Cream - Mix in Cup Feedback	10/11/2011	HBBF0062464-470	AnnMarieBlackmon_21	402; 403; 802
191	2011-10-13 email from Schiavi to Hamilton Beach re F'real Self Serve Blend-in-Cup	10/13/2011	HBBF0059257-258	AnnMarieBlackmon_19	402; 403; 802
192	2011-10-20 email from Waite to Ryan and Holder re HB Blender machine	10/20/2011	HCC 004818-820	ZacharyWaite_36	402; 403; 802
193	2012-01-16 email from O'Flynn to Chairez re GM42 Top Component Costs	01/16/2012	HBBF0048163	BrianPWilliams_24	402; 403
194	2012-02-11 email from Wood to Branson re Cost Update Information	02/11/2012	HBBF0023111-118	BrianPWilliams_25	402; 403; 802
195	2012-03-07 email from Waite to O'Flynn and Holder re agenda for tomorrow	03/08/2012	HCC_025577-578	ZacharyWaite_34	
196	2012-04-06 email from Branson to Blackmon re How's the blending?	04/06/2012	HBBF0052377-379	BenBranson_17	402; 403
197	2012-04-12 email from Blackmon to Williams re Hershey's questions	04/12/2012	HBBF0019886-888	BrianPWilliams_27	402; 403
198	2012-04-27 email from Garcia to Wood re Connecting about f'real (f'real sales)	04/27/2012	HBBF0120016-017	GregHTrepp_7	402; 403; 802
199	2012-05-10 email from Pryor to Blackmon - Questions from Dunkin Brands	05/10/2012	HBBF0019873	BrianPWilliams_28	402; 403; 802
200	2012-06-08 email from Wood re Follow Up (PONY Financial Model; f'real Cup Velocity; Consumer research; Project Revolution; Audited Financials)	06/08/2012	HBBF0120187		402; 403; 802
201	2012-06-14 email from Wood to Trepp re f'real Summary	06/14/2012	HBBF0105870-874	GregHTrepp_10	402; 403; 802
202	2012-06-18 email from Rankin to Trepp re Follow up on two partnership opportunities (f'real sale)	06/18/2012	HBBF0167874-875	GregHTrepp_13	402; 403; 802
203	2012-06-18 email from Taylor to Trepp and Wood re f'real Summary	06/18/2012	HBBF0119663		402; 403; 802
204	2012-06-18 email from Taylor to Trepp and Wood re F'real Summary (f'real sale)	06/18/2012	HBBF0119663	GregHTrepp_11	402; 403; 802
205	2012-06-19 email from Blackmon to Zafirson re Questons for tomorrow's meeting	06/19/2012	HBBF0148654-655	AnnMarieBlackmon_27	402; 403; 802
206	2012-06-21 email from Williams to Blackmon re Notes from Dunkin Brands/Baskin Robbins Visit	06/21/2012	HBBF0023110	BrianPWilliams_30	402; 403; 802
207	2012-08-27 email from Waite to Holder re CC thoughts	08/27/2012	HCC 004983-984	GeorgeHolder_8	402; 403; 802
208	2012-09-10 email from Farrell to Geppert re Hey, Andy (regarding Employee Confidential and Inventions Agreement)	09/10/2012	FREAL 186799-800		
209	2012-09-12 email from Barkauskas to Blackmon re Hershey's Timeline	09/12/2012	HBBF0165158	AnnMarieBlackmon_37	106; 402; 403; 802
210	2012-09-28 email from Blackmon to Zafirson re Checking in (Blendtec)	09/28/2012	HBBF0149111-114	AnnMarieBlackmon_28	402; 403; 802
211	2012-12-05 email from Blackmon to Basiliere re Thank you for your time today (Nestle follow up December 2012)	12/05/2012	HBBF0166437-441	AnnMarieBlackmon_39	402; 403

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212	2012-12-14 email from Blackmon to Kropp re Self Serve Blizzards for Convenience Stores	12/14/2012	HBBF0151185-186	AnnMarieBlackmon_30	402; 403; 802
213	2013-02-21 email from Blackmon to Zafirson re HBC Talking Points with Dunkin Brands	02/21/2013	HBBF0152145-199	AnnMarieBlackmon_32	402; 403; 802
214	2013-04-26 email from Waite to Holder re f'real	04/26/2013	HCC 005044-045		402; 403; 802
215	2013-05-22 email from Branson to Waite re Review of Call with Hamilton Beach 5-22-13	05/22/2013	HBBF0052862-863	BenBranson_19	402; 403; 802
216	2013-05-22 email from Waite to Branson and Blackmon re Review of Call with Hamilton Beach 5-22-13	05/22/2013	HBBF0051677-678	ZacharyWaite_37	402; 403; 802
217	2013-06-04 email from Blackmon re Blend in Cup Update - Need by end of Tuesday	06/04/2013	HBBF0151891-892	AnnMarieBlackmon_31	402; 403; 802
218	2013-06-05 email from Holder to Spataro and Waite re Shake Shop	06/05/2013	HCC 005070	ZacharyWaite_44	402; 403; 802
219	2013-07-29 email from Blackmon to Wood re Hershey slide	07/29/2013	HBBF0101983-984	AnnMarieBlackmon_22	402; 403
220	2013-08-12 email from Blackmon to Spencer and Williams re BIC trials and Jake's Hamburgers	08/12/2013	HBBF0045614	BrianPWilliams_31	402; 403; 802
221	2013-10-09 email from Blackmon to Preis re Are you going to NACS?	10/09/2013	HBBF0156703-707	AnnMarieBlackmon_34	402; 403
222	2013-11-01 email from Wood to Reed, Blackmon, Schiavi re Causing a big stir!	11/01/2013	HBBF0060799-800	AnnMarieBlackmon_6	402; 403; 802
223	2013-11-13 email from Blackmon to Pries re Update and question (MIC Oct 2013)	11/13/2013	HBBF0154139-142	AnnMarieBlackmon_33	402; 403; 802
224	2013-11-15 email from Blackmon to Waite re Target convenience stores	11/15/2013	HBBF0154099-101	AnnMarieBlackmon_5	402; 403; 802
225	2013-11-20 email from Guzdar to Gobel re Hershey's Did Not Participate At OUTLOOK Last Week	11/20/2013		MichaelPAkemannPhD_5	
226	2013-11-21 email from Wood re Business Overview from Sales Meeting	11/21/2013	HBBF0106710-754		402; 403
227	2013-12-03 email from Blackmon to Cowles re Eclipse and Toaster	12/03/2013	HBBF0160118-122	AnnMarieBlackmon_35	402; 403
228	2013-12-03 email from Waite to Scharlau re preliminary call notes	12/03/2013	HCC 014250-253	ZacharyWaite_42	402; 403
229	2013-12-12 email from Blackmon to O'Flynn and Branson re BIC test needs	12/12/2013	HBBF0052848	AnnMarieBlackmon_17	402; 403; 802
230	2013-12-12 email from Waite re to Holder f'real Info	12/12/2013	HCC005271		402; 403; 802
231	2014-02-25 email from Smartsheet.com to Blackmon re Confirmation	02/25/2014	HBBF0162823-824	AnnMarieBlackmon_8	402; 403
232	2014-03-12 email from Blackmon re Race Track / Hershey's dates for a call	03/12/2014	HBBF0162580-585		402; 403; 802
233	2014-03-12 email from Wood to Reed Meeting Thursday with Hershey's	03/12/2014	HBBF0104416-417	AnnMarieBlackmon_23	402; 403; 802
234	2014-03-17 email from Blackmon Georgeff re Questions	03/17/2014	HBBF0123186-187	AnnMarieBlackmon_25	402; 403; 802
235	2014-04-06 email from Blackmon to Zachary Waite and Holder re SSE Meeting Follow Up	04/06/2014	HCC_026752-754	GeorgeHolder_26	402; 403
236	2014-04-15 email from Reed to Waite and Blackmon NACS Show Waitlist	04/15/2014	HCC 015295-296	AnnMarieBlackmon_40	402; 403; 802
237	2014-06-07 email from Saez to Voges re Competitors	06/07/2014	FREAL 134246-251	MichaelPAkemannPhD_7	
238	2014-06-17 email from Preston to Scott, Waite, and Holder re The Close	06/17/2014	HCC 009686	ChuckPreston_5	402; 403
239	2014-06-18 Email Justin Scott to Chuck Preston, et al.	06/18/2014	HCC 022408-409	ChuckPreston_6	402; 403; 802
240	2014-07-01 email from Branson to Waite re Lewistown Store / NSF approval	07/01/2014	HBBF0018046-048	BrianPWilliams_32	402; 403; 802
241	2014-07-07 email from Blackmon to Williams re cup designs	07/07/2014	HBBF0019312-313	AnnMarieBlackmon_13	402; 403
242	2014-07-08 email from Skalka to Waite and Scharlau re HB Broker Sheet	07/08/2014	HCC 020545-550	ZacharyWaite_43	402; 403
243	2014-07-14 email from Waite to Preston Re SSE	07/14/2014	HCC 009889	ChuckPreston_10	402; 403; 802
244	2014-07-31 email from Waite to Jorgensen and Holder re Saint Anselm College	07/31/2014	HCC_016569	ZacharyWaite_47	403; 802
245	2014-08-13 email from Scharlau to Preston, Holder, Waite re Ssx	08/13/2014	HCC 010433-434	ChuckPreston_11	402; 403

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246	2014-08-25 email from Waite Blackmon re Hershey's Wants to cancel POs	08/25/2014	HCC_016761-762	ZacharyWaite_12	402; 403
247	2014-08-25 email from Wood to Trepp re Hershey's Wants to cancel Pos	08/25/2014	HBBF0109237-240	HenryRWood_18	402; 403
248	2014-08-27 email from Chuck Preston to Waite and Holder re getting people to take pics with shakes!	08/27/2014	HCC_010755	ChuckPreston_12	402; 403
249	2014-08-28 email from Waite to Holder re SSE - let's talk about this	08/28/2014	HCC_005380-381	ZacharyWaite_13	402; 403
250	2014-09-11 email from Wood to Jim Taylor and Dan Gallagher re Royalaty to Cornelius on BIC or MIC	09/11/2014	HBBF0058223	GregHTrepp_3	402; 403
251	2014-12-05 email from Waite to Engle, Gostomski, and Holder re MIC2000 price increase	12/05/2014	HCC_005437	ZacharyWaite_14	402; 403
252	2014-12-17 email from Kukulka to Guzdar re A little help	12/17/2014	FREAL_223780-781		402; 403; 802
253	2015-02-09 email from Scharlau to Waite re Shake Shop Numbers	02/09/2015	HCC022804		403; 802
254	2015-02-12 email from Preston re Send Data from e555 1/23/15	02/12/2015	HCC_013502-505	ChuckPreston_4	402; 403; 802
255	2018-06-07 email from Guzdar to Malchoff re Competition for f'real...And much, much more.	06/07/2018	RPC002485-487	MichaelPAkemannPhD_14	402; 403; 802
256	AMP Sales Order 2002-12-17	12/17/2002	FREAL_000766		402; 403
257	"Milkshakes" re milkshake sales	Undated	HCC_006147		402; 403; 106; 802
258	2002 Milkshake Mixer Criteria	2002	FREAL_000538-576		
259	2002-08-05 F'real Milkshake Mixer Criteria, Ideation Phase	08/05/2002	FARRELL003070-072	JamesFarrell_5	403
260	2003 Epstein Lost Profits Damages	2003			
261	2006 f'REAL! Installation and Operations Guide FRLB2	Undated			
262	2007-12-17 Business Wire - Archibald Frozen Desserts	12/17/2007			901
263	2009-08-17 HB/f'real Bilateral Confidentiality Agreement - Unredacted - NDA	08/17/2009			
264	2010-2011 f'real Financial Statement	2010-2011	HBBF0120214-230		
265	2011 f'real Marketing Planning	11/02/2011	FREAL_243335-433		602; 901; 802; 403
266	2011-01-18 email from Ryan to Williams and Wood re Mix in Cup - Project Summary re C-stores	01/18/2011	HCC003033-34-034		402; 403
267	2011-2012 f'real YTD Financials	2011-2012	HBBF0120232		106; 602; 901
268	2012-11-10 Vending Times - Jed, Emily - Fastcorp Factory Extends...	11/10/2012			901
269	2013 f'real bar chart Equipment Sales Quantities	2013	FREAL_236723		106; 402; 403; 602; 901
270	2013 Merchandise Licensing Agreement - Hershey Creamery	2013	HCC023365-382		402; 403
271	2013-2014 Hamilton Beach Financial Statements	2013-2014	HBBF0013196-234		
272	2013-2014 Hershey Creamery Financial Statements	2013-2014	HCC017494-520		
273	2013-2014 Spreadsheet - Costs MIC and BIC machines	2013-2014	HBBF0171455		
274	2014-01-16 f'real Financial Reporting	01/16/2014	FREAL_236690-691		602; 901; 1002
275	2014-01-29 Purchase and Distribution Agreement	01/29/2014	HBBF0010747-760		
276	2014-07-22 f'real Strategic Growth Plan	07/22/2014	FREAL_236385-479		
277	2014-07-22 f'real Strategic Growth Plan	07/22/2014	FREAL_236386-449	MarkPeterson_7	106; 403
278	2014-2017 f'real spreadsheet Inventories	Undated	FREAL_237036		602; 901; 1002
279	2015 f'real spreadsheet - Production/Demand	Undated	FREAL_237039		602; 901; 1002
280	2015 Spreadsheet - Costs MIC and BIC machines	Undated	HBBF0171454		
281	2015-06 Rich's Global Intellectual Property Licensing Policy	06/2015	RPC000772-783		
282	2015-2018 f'real spreadsheet - Blender Units	Undated	FREAL_243272		602; 901; 1002
283	2017 Annual Report - Hamilton Beach	2017			
284	2017 Hershey Creamery Financial Statements	12/31/2017	HCC017573-597		
285	2017-07-25 Approved Equipment Contract between American Dairy Queen Corporation and Hamilton Beach Brands Inc.	7/25/2017	HBBF0120252-267		
286	2018-07-12 Hershey Interrogatory Responses (excerpts)	7/12/2018			106

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287	2018-09-24 Expert Rebuttal Report of Dr. Michael P. Akemann	09/24/2018		MichaelPAkemannPhD 1	402; 403; 802; 702
288	4 Year Draft Strategy, Draft 10/16/14	Undated	FREAL 100686-695	MichaelPAkemannPhD 10	403; 602; 901
289	Agreement Between Hamilton Beach Brands Inc. and Conair Corporation	9/22/2017	HBBF0170660-64-664		402
290	Agreement Between Hamilton Beach Brans and Conair Corporation	9/22/2017	HBBF0170660-664		402; 403
291	Anderson Machine Quote	08/05/2009	HBBF0005634	BenBranson_3	402; 403
292	Archibald Frozen Desserts Crunchbase - Operating Status	Undated			602; 901
293	Archibald Frozen Desserts - ReadyShakePresentation	Undated			602; 901
294	Beverage equipment trends target zero waste, efficiency and convenienc - Nation's Restaurant News	Undated			602; 901
295	Beverage Serving & Menu Imporance	12/2015	FREAL 005612		602; 901
296	Beverage Servings & Menu Importance - The NPD Group/CREST 2007-2012	07/2012	FREAL 244935		403; 602; 901
297	BIC 3000-DQ HFBM Cleaning Instructions-wLink	11/01/2017	FREAL 005879-882		602; 901
298	Bilateral Confidentiality Agreement - Redacted NDA	Undated			402
299	CAD Parts Diagram - GM42 IMI Blender Module	Undated			
300	CAD Parts Diagram - GM43 MIC Stand Alone	Undated			
301	CAD Spec Sheets and drawings	Undated	HBBF0000454-496		
302	Café Zero Facebook page - About	Undated			403
303	Café Zero Website - Exxxpresso	Undated			602; 901
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305	Claim Chart Summary deposition testimony by Hamilton Beach's engineers and Dr. Slocum regarding literal infringement for each element of Claim 21 of the 7.520.662 patent	2017-2018			402; 403; 602; 901; 1002
306	Claim Chart Summary of deposition testimony by Hamilton Beach's engineers and Dr. Slocum regarding literal infringement of nearly all the elements of Claim 15 of the 7.144.150 patent	2017-2018			402; 403; 602; 901; 1002
307	Cold Cow Ice Cream - OMNI Food Concepts, Inc	Undated			402; 403; 602; 901
308	Cold Cow Microwave Milkshakes Selwyn, Jeremy - Cold Cow's special setup simplifies shake-making	Undated			402; 403; 602; 901
309	Cold Cow Sell Sheet Advertised Price	Undated			402; 403; 602; 901
310	Commercial Freezers Commercial Coolers Commercial Minus 40 Refrigeration	Undated			402; 403; 602; 901
311	Corporate One-Shot Ice Cream Coporation	Undated			402; 403; 602; 901
312	CREST Executive Topline Report 2015	12/2015	FREAL 005613-622		402; 403; 602; 901
313	CSP - Categaory Management Handbook 2016 - Frozen Food Commercial Success	Undated			402; 403; 602; 901
314	Cups per year since 2002 - redacted	Undated			402; 403; 602; 901; 1002
315	Curriculum Vitae of Daniel Maynes	Undated			
316	Curriculum Vitae of Michael Akeman	07/2018			
317	Dairy Queen Hands Free Blizzard Machine Wasserstrom	2018			402; 403; 602; 901; 1002
318	Declaration of Andrew Geppert, originally filed in C.A. No. 14-1270, D.I. 96) Geppert Dep. Ex. 36	12/24/2015			402; 403; 802; 701
319	Declaration of Bruce Tharp 1999-03-20	05/17/1996		BruceTharp Tharp2	
320	Declaration of Bruce Tharp supporting Farrell application 1999-03-20	05/30/1997	FARRELL000879-884		
321	Declaration of James J. Farrell f'real Foods LLC v. Hamilton Beach Brands, Inc. et al- 7.520.662 - 8/27/2015	08/27/2015			402; 403; 802; 701
322	Declaration of Jens Voges Re Secondary Considerations IPR-2016-011-07 - 2017-03-13	03/13/2017			402; 403; 602; 802; 701; 105
323	Declaration of Thomas Kramer, originally filed in C.A. No. 14-1270, D.I. 97) Kramer Dep. Ex. 40	12/18/2015			402; 403; 802; 701

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324	Declaration of Zachary Waite 2018-08-22	08/22/2018		MichaelPAkemannPhD 4	
325	Defendant Hershey Creamery Company's Answers to Plaintiff's Interrogatories, First Set	03/23/2015		ZacharyWaite_3	
326	Deposition of Jens Voges 6/13/18 - excerpts	06/13/2018		MichaelPAkemannPhD 13	106; 802
327	Document titled "Dukin' [sic] Brands Visit"	06/20/2012	HBBF0048803-807	BrianPWilliams 29	402; 403; 802
328	Document titled "Hershey's Ice Cream and Hamilton Beach Bring Milkshakes to the Masses"	Undated	HBBF0010817-818	BrianPWilliams_39	402; 403; 802
329	drawing of blender by Ben Branson 2009	05/11/2009	HBBF0009300		
330	Ebulent Website, About Ebulent	Undated			402; 602; 901
331	Ebulent Website, Team	Undated			402; 602; 901
332	Exhibit B of Maynes Report MIC2000 Aerates-02 TP000X Determination of Overrun in Pre-blend and Blended Product Test Protocol	Undated			FRCP 37; 703; 602; 901; MIL
333	Exhibit B of Maynes Report MIC2000 Aerates-03 Hamilton Beach Overrun Report	Undated			FRCP 37; 703; 602; 901; MIL
334	F'Real FRLB2 Blender User Handbook	Undated			
335	F'Real FRLB4 Blender User Handbook	Undated			
336	Farrell Dep. Ex. 22 (Plaintiff f'real Foods LLC's Responses to Defendant Hamilton Beach Brand Inc.'s First Set of Requests for Admission (Nos. 1-20)	04/05/2018			5
337	Farrell handwritten notes; drawings	5/30/2002	FREAL 000594-597		602; 901
338	Farrell notes and hand drawings to Andy	Undated	FARRELL003073-075		602; 901
339	Farrell notes and hand drawings to Andy	Undated	FARRELL003078-085		602; 901
340	Financial Statement Hershey Creamery - 2013-2014	2013-2014	HCC 017494-520		
341	Financial Statement Hershey Creamery - 2015	12/31/2015	HCC 017521-546		
342	Financial Statement Hershey Creamery - 2016	12/31/2016	HCC 017547-572		
343	Financial Statement Hershey Creamery - 2017	12/31/2017	HCC 017573-597		
344	Folder "Freal Style Machine"	Undated			402; 403
345	f'real B6 Blender Technical Info	03/29/2017			
346	f'real blenders practicing _662 patent method	Undated			402; 403; 602; 701; 702; 901
347	f'real Cup Velocity	Undated	HBBF0120190-191		402; 403
348	f'real Engineering Financial Review March 1, 2018-May 1, 2018	05/01/2018	FREAL 245005-012		402; 403; 602; 901
349	f'real Equipment PNL Report December 2017	12/2017	FREAL 243281-315		
350	f'real Foods, LLC Financial Statements and Supplementary Schedules - December 31, 2008 and 2007	2007-2008	FREAL_005535-551		
351	f'real Foods, LLC Financial Statements and Supplementary Schedules - December 31, 2010 and 2009	2009-2010	FREAL_005552-568		
352	f'real Foods, LLC Financial Statements and Supplementary Schedules - December 31, 2011 and 2010	2010-2011	FREAL_005569-585		
353	f'Real Foods, LLC Transaction Opportunity Power Point	08/16/2018	HBBF0120022-026	GregHTrepp 8	402; 403
354	f'real Milk Shake Mixer Project Schedule	08/21/2003	FARRELL000004.3159 (2 pages)		402; 403; 602; 901
355	f'real Order Confirmation	07/23/2015	FREAL 040494		402; 403; 602; 901
356	f'real Order Confirmation	07/28/2015	FREAL 040514		402; 403; 602; 901
357	f'real Order Confirmation	08/06/2015	FREAL 040587		402; 403; 602; 901
358	f'real Order Confirmation	08/06/2015	FREAL 040588		402; 403; 602; 901
359	f'real Order Confirmation	08/06/2015	FREAL 040590-590		402; 403; 602; 901
360	f'real Sales Brochure	Undated	FARRELL001635-644		402; 403
361	f'real Sales Order	06/08/2011	FREAL 016947		402; 403; 602; 901

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362	f'real Sales Order	05/3/2012	FREAL 018867		402; 403; 602; 902
363	f'real Sales Order	06/01/2012	FREAL 018893		402; 403; 602; 903
364	f'real Sales Order	03/13/2012	FREAL 020266		402; 403; 602; 904
365	f'real Sales Order	04/03/2012	FREAL 020264		402; 403; 602; 905
366	f'real Sales Order	04/13/2012	FREAL 020848		402; 403; 602; 906
367	f'real Sales Order	04/13/2012	FREAL 020849		402; 403; 602; 907
368	f'real Sales Order	04/18/2012	FREAL 021035		402; 403; 602; 908
369	f'real Sales Order	05/03/2012	FREAL 021395		402; 403; 602; 909
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371	f'real Sales Order	06/22/2012	FREAL 022412		402; 403; 602; 911
372	f'real Sales Order	07/18/2012	FREAL 022904		402; 403; 602; 912
373	f'real Sales Order	08/06/2013	FREAL 025963		402; 403; 602; 913
374	f'real spreadsheet - Sales Orders	Undated	FREAL 244950		
375	f'real Upcharge Program	Undated	FREAL 243266		402; 403; 602; 901
376	F'real Website - Behind Counter	Undated			402; 403; 602; 901
377	Fresh Blends - Self Rinse Support	Undated			402; 403; 602; 901
378	Fresh Blends Website - Multiplex Fresh Blender	Undated			402; 403; 602; 901
379	FRLB2 and FRLB2-S Installation and Operation Guide, F'Real	Undated			
380	Frozen Novelty Convenience Store Sales 2016	Undated			402; 403; 602; 901; 802
381	Got a Minute? Make a Shake! PowerPoint presentation on MIC2000 and Shake Shop Express 8/25/14	08/25/2014	HBBF0011017-027	BrianOFlynn_4	402; 403
382	Graphic of f'real machine - Freshley blended fun	Undated	FARRELL000003.0229		
383	Hadley "f'real Confidential Memorandum" for f'real sale	Undated	RPC000831-932	MichaelPAkemannPhD 12	
384	Hadley Partners f'real Confidential Memo	Undated	RPC000831-932		403
385	Hamilton Beach - Our History	Undated			
386	Hamilton Beach - SmartServe Blend in Cup BIC2000	Undated			
387	Hamilton Beach - SmartServe Mix in Cup MIC2000	Undated			
388	Hamilton Beach - SmartServe Mix in Cup MIC2000 - Self Rinsing	Undated			
389	Hamilton Beach Accused Blender Reasonable Royalties Under the '150 Patent Family and the '377 Patent	Undated			
390	Hamilton Beach BIC2000 Website Page	08/16/2018		GregHTrepp 6	403
391	Hamilton Beach BIC3000-DQ specs (black & white)	Undated	FREAL 005876-877	AnnMarieBlackmon 11	
392	Hamilton Beach BIC3000-DQ specs (color))	Undated	FREAL 005876-877		403
393	Hamilton Beach Brand Inc.'s responses to Plaintiff's first set of interrogatories to Defendant Hamilton Beach Brands, Inc.	02/23/2015		MichaelSandford_8	
394	Hamilton Beach Cup Holder Evaluation	Undated	HBBF0002125-131	BenBranson 22	402; 403
395	Hamilton Beach current website identifying SmartServe to BIC2000/MIC2000	Undated			403
396	Hamilton Beach Dairy Queen Blizzard Machine Operation Manual	05/04/2018			
397	Hamilton Beach f'real financials	Undated	HBBF0119668	MichaelSanford 7	402; 403
398	Hamilton Beach f'real Overviews for sale	Undated	HBBF0119664		403
399	Hamilton Beach GM44 CLOSED Issues list	10/02/2017	HBBF0014792-818		
400	Hamilton Beach Machines Depreciation Summary 2013-2020	2013-2020	HCC 017742		402; 403
401	Hamilton Beach MIC/BIC2000 Sales Spreadsheet	Undated	HBBF0171453	MichaelSanford 3	
402	Hamilton Beach MIC2000 pricing	Undated	HBBF0010805	AnnMarieBlackmon 9	
403	Hamilton Beach MIC2000 Safety Submissions	Undated	HBBF0000001-044	BenBranson 26	402; 403
404	Hamilton Beach Payments Inquiry Details; Letter to Hartley with \$50,000	10/20/2014	HBBF0000645-650		

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405	Hamilton Beach Product Definition Spec for IMI2000, MIC2000, and BIC2000	Undated	HBBF0000482; HBBF0000488; HBBF0000496		
406	Hamilton Beach Service Manual MIC2000 BIC2000	08/2014	HBBF0000686-777		
407	Hamilton Beach Shipment Spreadsheet	06/15/2018	HBBF0171456	MichaelSanford 2	403
408	Hamilton Beach sketches of f'real blender	Undated	HCC001103-105	BrianPWilliams 38	402; 403; 602; 901
409	Hamilton Beach spread sheet - MIC2000	06/15/2018	HBBF0171454	MichaelSanford 4	403
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413	Hamilton Beach/Omega Settlement Agreement 6/16/16	07/14/2016	HBBF0120375-381	GregHTrepp 14	402; 403
414	Hamilton BeachB Shipment Spreadsheet	06/17/2018	HBBF0171455	MarkPeterson 13	403
415	Hamilton Beach's Second Interrogatory Responses	03/30/2018		AnnMarieBlackmon 2	
416	handwritten notes; drawings - Phone call from Farrell	05/21/2002	FREAL 000635-639		402; 403; 602; 901
417	Hausman Leonard and Sidak Patent Damages and Real Options	Undated			
418	Haydon Kerk Invoice September/November 2009	9/21/2009, 9/22/2009,	HBBF0008993-994	BenBranson_4	402; 403
419	HB f'real Power Point re Growth in the Independent Channel of Business [FREAL 223780]	2014	FREAL_223782-HIS		106; 402; 403; 602; 901
420	Hershey Active and Deployed MIC2000 Blenders as of July 2018	07/2018			
421	Hershey Balance sheet	Undated	HCC 017737	GeorgeHolder 16	
422	Hershey Creamery Company, Inc. Private Company Information - Bloomberg	08/14/2018			402; 403; 602; 901
423	Hershey Customer Spreadsheet: Monthly fees for milkshake machines	Undated	HCC 027246	GeorgeHolder 22	
424	Hershey Excel spreadsheet, accumulation of cases sold by years	Undated	HCC 017673	GeorgeHolder 15	
425	Hershey Live inventory shot of finished milkshakes	Undated		GeorgeHolder 14	
426	Hershey Live listing of where the Hamilton Beach MIC2000 blenders are	Undated		GeorgeHolder 13	402; 403
427	Hershey PowerPoint Presentation	03/08/2014	HCC 000916-952	ZacharyWaite 40	
428	Hershey Spreadsheet	Undated	HCC 017735	GeorgeHolder 18	
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434	Hershey's Chocolate and Hershey's Ice Cream Aren't Related Mental Floss	03/08/2017			402; 403; 602; 901; 802
435	Hershey's Ice Cream About Us	Undated			
436	Igus Quote	11/10/2009	HBBF0005669-671	BenBranson 5	402; 403
437	Images and drawings of Shake Shop Express displays	Undated	HCC00025-130		402; 403; MD
438	Initial Shake Shop Express surround with xpedx	Undated	HCC 000038-051	ChuckPreston 2	402; 403
439	Jarosch and Chapman-The Hypothetical Negotiation and Reasonable Royalty Damages	2013			
440	Joint Appendix-Fed Cir 1274-Appeal of IPR, Case No 1107	05/18/2018			MIL; 402; 403; 602; 701; 702; 802; 901; MD
441	Kablooe Design - Farrell handwritten notes on doors, trough, cups	2002	FARRELL003042-051		402; 403; 602; 901
442	Kablooe Invoice 1083 2003-05-09	05/09/2003	KABLOOE 000253-463		
443	Kablooe Meeting 4/12/02	04/12/2002	FARRELL003207-211		
444	Letter, Nieman to Chambers re Shake Shop Express kiosks 5/22/15	05/22/2015	HCC000025-130	ZacharyWaite 4	402; 403; 602; 901
445	Letter, Nieman to Chambers re Hershey Shake Shop Express 5/11/15	05/11/2015	HCC000001-024	ZacharyWaite 5	402; 403; 602; 901

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446	Mack Molding Website, Company Overview	08/23/2018			402; 403; 602; 901
447	Meeting with Control Products handwritten notes; drawings 5/15/02	05/15/2002	FREAL 000640-641		402; 403; 602; 901
448	MIC2000 - Patent Issue Power Point 6/9/15	06/09/2015	HBBF0050312-320	BrianOFlynn 6	402; 403
449	MIC2000-BIC2000 Service Manual	03/17/2014	HBBF0037890-975		
450	Minus Forty Website	08/23/2018			402; 403; 602; 901
451	Model FRLB4 - f'real "In-Cup Blender With Chemical-free Automated Clean-in-Place System"	Undated	FREAL 131216-220		403
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454	Multiplex Beverage - Fresh Blender - Blend-in-Cup	Undated			402; 403; 602; 901
455	Multiplex Blend-in-Cup Workstation	Undated			402; 403; 602; 901
456	NACS Trade Show Daily News 2016-10	10/21/2016			402; 403; 602; 901
457	NACS Website - About NACS	Undated			402; 403; 602; 901
458	NACS Website - Category Close-Up Frozen Dispensed Beverages NACS – Magazine – Past Issues 2010-03	03/2010			402; 403; 602; 901
459	NACS Website - Ice Cold Profits NACS – Magazine – Past Issues 2016-07	07/2016			402; 403; 602; 901
460	Nestle's Blenderz - Dairy Foods - Dairy Processors Shake It Up at C-Store Show 11/11/2011	11/11/2011			402; 403; 602; 901
461	Notes of Kablooe meeting 4/12/02	04/12/2002	KABLOOE 000124-126	JamesFarrell 3	403
462	NPD Group Data/QUEST - native Excel	Undated	FREAL 005612		402; 403; 602; 901
463	NPD State of the Industry YE December 2016	12/2016	FREAL 235643-661		402; 403; 602; 901
464	Opening Expert Report of Daniel Maynes, PhD Concerning Infringement of F'Real's Patents-in-suit	08/23/2018			402; 403; 702; 602; 802
465	Opening Expert Report of Dr. Michael P. Akemann 8/24/18	08/24/2018		MichaelPAkemannPhD 2	402; 403; 702; 602; 802
466	Order Construing the Terms of US Patents 5,803,377, 7,144,150, 7,520,658, and 7,520,622 - 11/29/17	11/29/2017			
467	Parts and Accessories Diagram GM44 (BIC 3000-DQ)	11/26/2018			
468	Petition for Inter Partes Review of Claims 1 and 5-11 (7,520,658 patent) 2016-05-27	05/27/2016			MIL; 402; 403
469	Presentation 2 thoughts - Farrell handwritten notes; drawings	Undated	FREAL 000592-593		402; 403; 602; 901
470	Probabilistic Patents - Mark A Lemley, Carl Shapiro	08/2004			
471	Product Definition Spec BIC2000 / BIC2000CE	Undated	HBBF0000129	BenBranson 23	
472	Product Definition Spec IMI2000 / IMI2000CE	Undated	HBBF0000122	BenBranson 25	403
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476	Product Definition Spec Sheet IMI2000 / IMI2000CE	Undated	HBBF0052809		403
477	Project Pony: Phase 1	Undated	HBBF0120193-212		402; 403; 602; 901
478	Promotional brochure for the BIC2000	Undated	HCC000218-219	BrianPWilliams 37	
479	Request for Ex Parte Reexamination of U.S. Patent No. 5,803,377 - 10/28/16	10/28/2016			
480	Resume of Jens Voges Resume	Undated			
481	Rich Products - Valuation of Identified Intangible Asset of f'real	01/31/2013	RPC000933-036		
482	Rich Products acquires f'real foods Food Business News 12/12/2012	12/12/2012			402; 403; 602; 901
483	Rich Products Corporation - f'real Income Statement December 2014	12/2014	FREAL 005587		
484	Rich Products Corporation Website - About	Undated			402; 403; 602; 802; .901
485	Rich Products Corporation Website - About - History	Undated			402; 403; 602; 802; .901
486	Rich Products Corporation Website - About - Leadership - Bob Rich	Undated			402; 403; 602; 802; .901
487	Rich Products Corporation Website - About - Subsidiary Businesses	Undated			402; 403; 602; 802; .901

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489	Rich Products Corporation Website - Our Businesses - US&Canada - Consumer Brands Division	Undated			402; 403; 602; 802; .901
490	Rich Products Corporation Website - Our Food - Consumer Brands	Undated			402; 403; 602; 802; .901
491	Royalties, evolving patent rights, and the value of innovation (with Sherry)	Undated			
492	Sales brochure for the Shake Shop Express	Undated	HCC 000240-243	ChuckPreston 3	
493	SAP Revenue spreadsheet 2012-2016 - native Excel	2012-2016			FRCP 37; 602; 901
494	Self Serve B6 Self-Serve Blender Freshly Blended Real Milkshakes	Undated			402; 403
495	Service part drawing for MIC2000 mix shield assembly	Undated	HBBF0001802	BrianPWilliams 13	
496	Settlement Agreement: Omega and Hamilton Beach	07/14/2016	HBBF0120375-381		402; 403
497	Shake Shop Express brochure	Undated	HCC 019722	DrLawrenceWu 9	402; 403; 802
498	Shake Shop Express Flyer	Undated	HBBF0010849	AnnMarieBlackmon 4	402; 403
499	Short Stop Deli Makes Profitable Switch to Hershey's Shake Shop Express	Undated	HCC 004215		106; 402; 403; 802
500	Situation Analysis Competitors and Consumers, Engle Saez 2014-06-27	06/27/2014	FREAL 096806-814	MichaelPAkemannPhD 6	402; 402; 602; 901; 802
501	specification Sharp microprocessor	12/01/2006	HBBF0010344-352	BrianPWilliams 35	
502	Spreadsheet - Project Pony Revenue/Sales	Undated	HBBF0120188		402; 403; 602; 901
503	Spreadsheet Commercial Summary	Undated	HBBF0103241		402; 403; 602; 901
504	Spreadsheet Fixed Assets - Freezers	Undated	HCC027158		
505	Spreadsheet Fixed Assets - Milkshakes	Undated	HCC027247		
506	Spreadsheet Profits and Loss	Undated	HBBF0103258		
507	Spreadsheet Profits and Loss	Undated	HBBF0103262		
508	Spreadsheet; f'real customers	Undated		MichaelPAkemannPhD 9	402; 403; 602; 901; 802
509	SSE Training Document	Undated	HCC 000709-715	ZacharyWaite 41	402; 403; 802
510	Tharp & Young On Ice Cream excerpts	2013		BruceTharp Tharp9	
511	The Minus Forty Advantage	Undated			402; 403; 602; 901
512	The Minus Forty Advantage Webarchive	Undated			402; 403; 602; 901
513	Third revised final joint claim construction charts	10/12/2017		MarkPeterson 10	
514	United States Milkshake Sales 2015	Undated			402; 403; 602; 901; 802
515	VirnetX Inc., & Sci. Applications Int'l Corp., v. Cisco Sys., Inc	09/16/2014			
516	Whiteboard handwritten meeting notes 2003	06/04/2003	FARRELL000004.0045		402; 403
517	Video Cleaning the Dairy Queen Hands Free Blizzard Machine	Undated	HBBF0014425		
518	Video Dairy Queen Hands Free Blizzard Machine	Undated	HBBF0013251		
519	Video SmartServe Blend in Cup BIC2000 Series	Undated			
520	Video SmartServe Blend in Cup BIC2000 Series	Undated			403
521	Hershey Lost Business Spreadsheet	Undated			402; 403; 602; 901; 802
522	Flyer for B1 Blender		FARRELL001635-44		901; 402; 403; 802
523	U.S. Patent No. 8,905,626	12/9/2014			402; 403
524	Assignment for U.S. Patent Appl. No. 29/254,928	05/07/2006			901; 402; 402; 802
525	f'real Culture Book	Ca. 2012	RPC002428-477		901; 403; 802
526	f'real Culture Book	Ca. 2012	FREAL 238616-635		901; 403; 802
527	U.S. Patent No. 1,090,148	03/17/1914	HBBF0001455-1457		
528	U.S. Patent No. RE25,490	11/26/1963	HBBF0001698-1706		
529	U.S. Patent No. 3,154,123	10/27/1964	HBBF0051178-180		
530	Alexander Slocum IPR Declaration re Patent 658	05/25/2016	IPR Exhibit 1008		402; 403; MIL
531	Alexander Slocum IPR Declaration re Patent 658	01/23/2017	IPR Exhibit 1013		402; 403; MIL
532	Alexander Slocum IPR Declaration re Patent 662	05/18/2016	IPR Exhibit 1010		402; 403; MIL
533	Alexander Slocum IPR Declaration re Patent 150	01/23/2017	IPR Exhibit 1016		402; 403; MIL
534	f'real B2 Blender		Physical Exhibit		Reserve until can see

Plaintiffs' Trial Exhibit List

535	Hamilton Beach MIC2000 Blender		Physical Exhibit		Reserve until can see
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PRETRIAL ORDER

EXHIBIT 11

F'Real Foods, LLC, et al. v. Hamilton Beach Brands, Inc., et al.

C.A. No. 16-41-CFC

Defendants' Trial Exhibit List

Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX001		HBBF0050321	HBBF0050425	Prosecution History for U.S. Patent No. 5,962,060	Incomplete Relevance
DTX002	12/10/1991			U.S. Patent No. 5,071,077 (Arroubi)	No Objection
DTX003	4/18/1989	F'REAL_091663	F'REAL_091668	U.S. Patent No. 4,822,175 (Barnard)	No Objection
DTX004	12/26/2000	HBBF0051217	HBBF0051230	U.S. Patent No. 6,164,575 (Karkos)	No Objection
DTX005	4/26/1988	F'REAL_240890	F'REAL_240897	U.S. Patent No. 4,740,088 (Kelly)	No Objection
DTX006	1/20/1987	HBBF0051469	HBBF0051479	U.S. Patent No. 4,637,221 (Levine)	No Objection
DTX007	2/4/1997	HBBF0051212	HBBF0051216	U.S. Patent No. 5,599,103 (Linscott)	No Objection
DTX008	4/25/2002			U.S. Patent App. No. US 2002/0048626A1 (Miller et al.)	No Objection
DTX009	8/8/1961	HBBF0051166	HBBF0051177	U.S. Patent. No. 2,995,158 (Oberg)	No Objection
DTX010	12/18/1992	HBBF0051146	HBBF0051153	JP H04-136787 U (Original)	Authentication Hearsay Motion in Limine Relevance
DTX011	12/18/1992	HBBF0051139	HBBF0051145	JP H04-136787 U (Translation)	Authentication Hearsay Improper Translation Motion in Limine Relevance
DTX012	1/22/2017	HBBF0051154	HBBF0051155	JP H04-136787 (Translation Certification)	Authentication Hearsay Motion in Limine Relevance
DTX013	9/8/1964			U.S. Patent No. 3,147,958 (Stiffler)	No Objection
DTX014	7/13/1926			U.S. Patent No. 1,592,788 (Supervielle)	No Objection
DTX015	1/3/1967	F'REAL_091371	F'REAL_091388	U.S. Patent No. 3,295,997 (Tomlinson)	No Objection
DTX016	8/8/1995	HBBF0039811	HBBF0039826	U.S. Patent No. 5,439,289 (Nielson)	No Objection
DTX017	11/15/2002			Provisional Application No. 60/426622	No Objection
DTX018	8/4/2016			U.S. Patent App. No. US 2016/0220069A1	Relevance
DTX019	12/11/2017			U.S. Design Patent No. D557,147S	Relevance
DTX020	10/5/1999			U.S. Patent No. 5,962,060 (Farrell)	Relevance
DTX021	4/2/2019			CV - Alexander H. Slocum (Ex. 1 to A. Slocum Opening Expert Report)	Hearsay
DTX022				Dictionary Definition - "shave" (Ex. 4 to A. Slocum Opening Expert Report)	Authentication Hearsay
DTX023				Dictionary Definition - "grate" (Ex. 5 to A. Slocum Opening Expert Report)	Authentication Hearsay
DTX024				Claim Chart - Invalidity of '377 Patent ('997 Patent) (Ex. 6 to A. Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX025				Claim Chart - Invalidity of '377 Patent ('158 Patent) (Ex. 7 to A. Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Relevance
DTX026				Claim Chart - Invalidity of '150 Patent (Admitted Prior Art) (Ex. 8 to A. Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Motion in Limine Relevance
DTX027				Claim Chart - Invalidity of '150 Patent (JP 1992-136787) (Ex. 9 to A. Slocum Opening Expert Report)	Expert Report Hearsay Improper Translation Legal Conclusion Misleading Relevance
DTX028				Claim Chart - Invalidity of '150 Patent ('289 Patent) (Ex. 10 to A. Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Relevance
DTX029				Claim Chart - Invalidity of '658 Patent (Admitted Prior Art) (Ex. 11 to Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Motion in Limine Relevance
DTX030				Claim Chart - Invalidity of '658 Patent ('289 Patent) (Ex. 12 to Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Relevance
DTX031				Claim Chart - Invalidity of '658 Patent (JP 1992-136787) (Ex. 13 to A. Slocum Opening Expert Report)	Expert Report Hearsay Improper Translation Legal Conclusion Misleading Relevance
DTX032				Claim Chart - Invalidity of '658 Patent ('158 Patent) (Ex. 14 to Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX033				Claim Chart - Invalidity of '662 Patent (Admitted Prior Art) (Ex. 15 to Slocum Opening Expert Report)	Expert Report Hearsay Legal Conclusion Misleading Motion in Limine Relevance
DTX034				Claim Chart - Invalidity of '662 Patent ('289 Patent) (Ex. 16 to Slocum Opening Expert Report)	Hearsay Legal Conclusion Misleading Relevance
DTX035	8/15/2017			Plaintiffs' Opening Claim Construction Brief (Dkt. No. 64)	Legal Conclusion Not Evidence Relevance
DTX036	9/7/2017			Plaintiffs' Answering Claim Construction Brief	Legal Conclusion Not Evidence Relevance
DTX037	10/12/2017			Third Revised Final Joint Claim Construction Charts (Dkt. No. 76)	Legal Conclusion Not Evidence Relevance
DTX038	11/29/2017			Order Construing the Terms of U.S. Patent Nos. 5,803,377; 7,144,150; 7,520,658; and 7,520,662 (Dkt. No. 83)	No Objection
DTX039	1/29/2018			Plaintiffs' Final Infringement Contentions for Defendants	Legal Conclusion Not Evidence Relevance
DTX040	2/12/2018			Defendant Hamilton Beach Brands, Inc.'s Final Patent Invalidity Contentions	Hearsay Legal Conclusion Not Evidence Relevance
DTX041	12/23/2015			Plaintiff F'Real Food LLC's Amended Responses to Defendant Hamilton Beach Brands, Inc.'s First Set of Interrogatories to Plaintiff (Nos. 1-11) (C.A. No. 14-1270-GMS)	Legal Conclusion Not Evidence Relevance
DTX042	4/5/2018			Plaintiff F'Real Foods, LLC's Responses to Defendant Hamilton Beach Brands, Inc.'s First Set of Requests for Admission (Nos. 1-20)	Legal Conclusion Not Evidence Relevance
DTX043	8/27/1994	F'REAL_000325	F'REAL_000332	Handwritten Design by James J. Farrell re A system for making a high quality milkshake or smoothie or the like	Authentication Hearsay Relevance
DTX044	6/13/2002	F'REAL_000743	F'REAL_000744	Email from J. Farrell to A. Geppert, ideas@kablooe.com re Concerns	No Objection
DTX045	10/15/1998	F'REAL_002373	F'REAL_002390	Fax from K. Frost to J. Farrell re Global IP Estimate	Authentication Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX046	05/04/2004	F'REAL_002850	F'REAL_002852	Letter from K. Frost to J. Farrell re U.S. Patent Application No. 10/715,171	Authentication Hearsay Relevance
DTX047	5/15/1997	F'REAL_003043	F'REAL_003048	PCT International Application Transmittal Letter (No. FRLL-100 PCT)	Authentication Hearsay Relevance
DTX048	10/24/2007	F'REAL_003700	F'REAL_003701	Email chain between K. Frost and J. Farrell re Foreign Applications for Splash Shield	Authentication Hearsay Relevance
DTX049	12/12/2005	F'REAL_004005	F'REAL_004016	PCT International Search Report (No. FRLL-720-PCT)	Authentication Hearsay Relevance
DTX050	10/4/2003	F'REAL_004524	F'REAL_004524	Technical Drawing - Taper, Cup Holder	Authentication Hearsay Relevance
DTX051	10/1/2003	F'REAL_004727	F'REAL_004727	Technical Drawing (unnamed)	Authentication Hearsay Relevance
DTX052	2/18/2003	F'REAL_004744	F'REAL_004744	Technical Drawing (unnamed)	No Objection
DTX053	03/13/2017	F'REAL_005783	F'REAL_005802	Declaration of Jens Voges Concerning Secondary Considerations (IPR2016-01107)	Hearsay Relevance
DTX054	9/5/2012	F'REAL_005942	F'REAL_005942	Email from J. Farrell to J. Huang re Some questions...	Authentication Hearsay Relevance
DTX055		F'REAL_006186	F'REAL_006187	Timeline - "F'real work history for Andy"	Authentication Hearsay Relevance
DTX056	8/22/2011	F'REAL_006263	F'REAL_006263	Email from A. Geppert to S. Williams re any historical photos?	Authentication Hearsay Relevance
DTX057	8/21/2012	F'REAL_006354	F'REAL_006355	Email chain between T. Kramer, A. Geppert, M. Aanenson re Paperwork Request	Authentication Hearsay Relevance
DTX058	9/10/2012	F'REAL_186799	F'REAL_186800	Email from J. Farrell to A. Geppert, J. Voges, J. Huang, S. Graeser re A. Geppert ECIA	Hearsay Relevance
DTX059	6/11/2008	F'REAL_186801	F'REAL_186806	Employee Confidential Information and Inventions Agreement - A. Geppert	Hearsay Relevance
DTX060	9/16/2014	F'REAL_097247	F'REAL_097247	Email chain between A. Geppert, J. Voges re 30 minutes of B2 history	Hearsay Relevance
DTX061	9/11/2012	F'REAL_151097	F'REAL_151098	Email from A. Geppert to J. Farrell, J. Voges, J. Huang re A. Geppert ECIA	Authentication Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX062	9/10/2012	F'REAL_151099	F'REAL_151100	Letter from J. Farrell to A. Geppert re Amendment to A. Geppert ECIA	Authentication Hearsay Relevance
DTX063		F'REAL_235591	F'REAL_235618	PowerPoint Presentation - "Welcome all you 'new' f'realies!"	Relevance
DTX064				F'Real Website - "About" ("What is F'Real?")	Authentication Hearsay Relevance
DTX065	1/11/2011	HBBF0000497	HBBF0000499	Email chain between H. Wood, J. Huang, et al. re Webex Meeting	Authentication Hearsay Relevance
DTX066	11/1/2002	FARRELL003089	FARRELL003091	Notes re Meeting 11/1/2002	Authentication Hearsay Relevance
DTX067	5/22/2002	FARRELL003142	FARRELL003159	Memo from J. Farrell to A. Geppert, T. Kramer re Ideation sketches (attached)	Authentication Hearsay Relevance
DTX068	10/7/2002	KABLOOE_000005	KABLOOE_000005	Kablooe Design Activity Tracking Report	Hearsay Relevance
DTX069	9/13/2002	KABLOOE_000009	KABLOOE_000009	Email from A. Geppert to T. Kramer, M. Weimholt, J. Farrell re Animation Video	Hearsay Relevance
DTX070	1/22/2004	KABLOOE_000087	KABLOOE_000090	Fax from J. Farrell to T. Kramer re Annex to Work Authorization Meeting - Promissory Note dated January 24, 2004	Hearsay Relevance
DTX071	05/13/2002	KABLOOE_000101	KABLOOE_000101	Email from A. Geppert to J. Farrell, T. Kramer re Progress notes for Ideation Phase - Presentation 1	Hearsay Relevance
DTX072	04/12/2002	KABLOOE_000124	KABLOOE_000126	Notes re Kablooe Meeting, 4/12/02	Hearsay Relevance
DTX073	11/07/2003	KABLOOE_000331	KABLOOE_000333	Invoice from Kablooe Design to F'Real Foods (with copy of check attached)	Hearsay Relevance
DTX074		KABLOOE_000466	KABLOOE_000467	F'real Milk Shake Mixer Project Summary	Hearsay Relevance
DTX075	02/18/2003	KABLOOE_008503	KABLOOE_008503	Technical Drawing - ASSM 03 Lower Spindle	Hearsay Relevance
DTX076		KABLOOE_020873	KABLOOE_020873	Video File re Demonstration of F'Real Milkshake Machine	Hearsay Relevance
DTX077	9/6/2002	KABLOOE_021351	KABLOOE_021351	Technical Drawing - Assembly 7 Front	Relevance
DTX078	7/29/2002	KABLOOE_021434	KABLOOE_021434	Technical Drawing - Milk Shake Mixer - Kablooe Design - A. Geppert	Relevance
DTX079		KABLOOE_023872	KABLOOE_023872	Technical Drawing - Milk Shake Mixer	Hearsay Relevance
DTX080		KABLOOE_026655	KABLOOE_026656	Email from T. Kramer to "Jim" re revised term sheet	Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX081	5/22/2012	KABLOOE_000145	KABLOOE_000149	Invoice No. 041502-1 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX082	6/14/2002	KABLOOE_000158	KABLOOE_000158	Invoice No. 041502-1 from Kablooe Design to F'Real Foods	Hearsay Relevance
DTX083	8/13/2002	KABLOOE_000120	KABLOOE_000120	Invoice No. 081302-1 from Kablooe Design to F'Real Foods	Hearsay Relevance
DTX084	9/5/2002	KABLOOE_000172	KABLOOE_000172	Invoice No. 041502-3 from Kablooe Design to F'Real Foods	Hearsay Relevance
DTX085	10/8/2002	KABLOOE_000178	KABLOOE_000178	Invoice No. 041502-4 from Kablooe Design to F'Real Foods	Authentication Hearsay Relevance
DTX086	10/8/2002	KABLOOE_000119	KABLOOE_000119	Invoice No. 041502-4 from Kablooe Design to F'Real Foods	Authentication Hearsay Relevance
DTX087	10/9/2002	KABLOOE_000004	KABLOOE_000004	Invoice No. 100902-3-2 from Kablooe Design to F'Real Foods	Authentication Hearsay Relevance
DTX088	10/22/2002	KABLOOE_000180	KABLOOE_000182	Invoice No. 041502-5 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX089	12/9/2002	KABLOOE_000183	KABLOOE_000189	Invoice No. 041502-6 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX090	12/30/2002	KABLOOE_000190	KABLOOE_000193	Invoice No. 041502-7 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX091	1/17/2003	KABLOOE_000195	KABLOOE_000198	Invoice No. 041502-8 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX092	1/27/2003	KABLOOE_000199	KABLOOE_000204	Invoice No. 1029 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX093	2/7/2003	KABLOOE_000205	KABLOOE_000212	Invoice No. 1038 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX094	2/14/2003	KABLOOE_000213	KABLOOE_000220	Invoice No. 1040 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX095	2/24/2003	KABLOOE_000221	KABLOOE_000228	Invoice No. 1044 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance
DTX096	3/10/2003	KABLOOE_000229	KABLOOE_000235	Invoice No. 1052 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX097	3/28/2003	KABLOOE_000236	KABLOOE_000243	Invoice No. 1068 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX098	4/11/2003	KABLOOE_000244	KABLOOE_000251	Invoice No. 1074 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX099	5/9/2003	KABLOOE_000252	KABLOOE_000260	Invoice No. 1083 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX100	5/19/2003	KABREV0001_000001 at 45	KABREV0001_000001 at 45	Invoice No. 1087 from Kablooe Design to F'Real Foods	Authentication Hearsay Not Produced Relevance
DTX101	5/29/2003	KABLOOE_000261	KABLOOE_000269	Invoice No. 1089 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX102	6/13/2003	KABLOOE_000270	KABLOOE_000277	Invoice No. 1096 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX103	6/30/2003	KABLOOE_000278	KABLOOE_000290	Invoice No. 1099 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX104	7/31/2003	KABLOOE_000291	KABLOOE_000296	Invoice No. 1114 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX105	8/13/2003	KABLOOE_000297	KABLOOE_000302	Invoice No. 1118 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX106	8/22/2003	KABLOOE_000303	KABLOOE_000305	Invoice No. 1120 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX107	9/8/2003	KABLOOE_000306	KABLOOE_000312	Invoice No. 1127 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX108	9/15/2003	KABLOOE_000313	KABLOOE_000320	Invoice No. 1129 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX109	9/26/2003	KABLOOE_000321	KABLOOE_000324	Invoice No. 1132 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX110	10/13/2003	KABLOOE_000325	KABLOOE_000327	Invoice No. 1142 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX111	10/24/2003	KABLOOE_000328	KABLOOE_000330	Invoice No. 1146 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX112	11/7/2003	KABLOOE_000331	KABLOOE_000333	Invoice No. 1149 from Kablooe Design to F'Real Foods (with related materials attached)	Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX113	12/1/2003	KABLOOE_000334	KABLOOE_000336	Invoice No. 1158 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX114	12/15/2003	KABLOOE_000337	KABLOOE_000339	Invoice No. 1170 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX115	1/2/2004	KABLOOE_000340	KABLOOE_000342	Invoice No. 1174 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX116	1/16/2004	KABLOOE_000343	KABLOOE_000345	Invoice No. 1177 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX117	2/2/2004	KABLOOE_000346	KABLOOE_000348	Invoice No. 1181 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX118	3/10/2004	KABLOOE_000349	KABLOOE_000351	Invoice No. 1193 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX119	4/5/2004	KABLOOE_000352	KABLOOE_000356	Invoice No. 1201 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX120	4/30/2004	KABREV0001_000001 at 264	KABREV0001_000001 at 264	Invoice No. 1218 from Kablooe Design to F'Real Foods	Authentication Hearsay Not Produced Relevance
DTX121	6/8/2004	KABLOOE_000361	KABLOOE_000364	Invoice No. 1228 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX122	7/16/2004	KABREV0001_000001 at 274	KABREV0001_000001 at 274	Invoice No. 1247 from Kablooe Design to F'Real Foods	Authentication Hearsay Not Produced Relevance
DTX123	8/9/2004	KABLOOE_000370	KABLOOE_000374	Invoice No. 1254 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX124	9/10/2004	KABREV0001_000001 at 284	KABREV0001_000001 at 284	Invoice No. 1267 from Kablooe Design to F'Real Foods	Authentication Hearsay Not Produced Relevance
DTX125	10/1/2004	KABLOOE_000378	KABLOOE_000382	Invoice No. 1271 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance

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DTX126	11/1/2004	KABLOOE_000383	KABLOOE_000386	Invoice No. 1282 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX127	12/1/2004	KABLOOE_000387	KABLOOE_000388	Invoice No. 1293 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX128	12/31/2004	KABLOOE_000081	KABLOOE_000081	Invoice No. 1299 from Kablooe Design to F'Real Foods	Authentication Hearsay Relevance
DTX129	2/1/2005	KABLOOE_000392	KABLOOE_000395	Invoice No. 1306 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX130	2/28/2005	KABLOOE_000396	KABLOOE_000399	Invoice No. 1321 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX131	4/4/2005	KABLOOE_000400	KABLOOE_000403	Invoice No. 1343 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX132	4/30/2005	KABLOOE_000404	KABLOOE_000407	Invoice No. 1359 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX133	6/1/2005	KABLOOE_000408	KABLOOE_000411	Invoice No. 1368 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX134	7/1/2005	KABLOOE_000412	KABLOOE_000415	Invoice No. 1385 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX135	7/31/2005	KABLOOE_000416	KABLOOE_000419	Invoice No. 1395 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX136	9/1/2005	KABLOOE_000420	KABLOOE_000426	Invoice No. 1415 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX137	9/30/2005	KABLOOE_000427	KABLOOE_000430	Invoice No. 1432 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX138	11/1/2005	KABLOOE_000431	KABLOOE_000433	Invoice No. 1449 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX139	12/1/2005	KABLOOE_000434	KABLOOE_000436	Invoice No. 1477 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance

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DTX140	1/1/2006	KABLOOE_000437	KABLOOE_000440	Invoice No. 1490 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX141	1/27/2006	KABLOOE_000114	KABLOOE_000115	Invoice No. 1505 from Kablooe Design to F'Real Foods (with related materials attached)	Authentication Hearsay Relevance
DTX142				Expert Report of April Kates	Authentication Hearsay Relevance Exhibit withdrawn per 11/5/18 Agreement
DTX143	8/24/2108			Expert Report of Bruce Tharp	Authentication Hearsay Relevance Exhibit limited by 11/5/18 Agreement
DTX144	7/12/2018			Plaintiff F'Real Foods LLC's Response to Third Set of Interrogatories Propounded by Defendant Hamilton Beach Brand, Inc.	Legal Conclusion Not Evidence Relevance
DTX145				Website Printout - "What is F'Real?"	Authentication Hearsay Relevance
DTX146	9/18/2009	FARRELL_003276	FARRELL_003278	Email from H. Wood to J. Farrell, cc B. O'Flynn, W. Hartley re Our response to your proposal	Authentication Hearsay Relevance
DTX147		F'REAL_000218	F'REAL_000219	F'Real Promotional Materials: "f'real vs. Hershey's - Comparison"	Authentication Hearsay Relevance
DTX148	2/24/2016	F'REAL_005589	F'REAL_005599	USPTO Notice of Recordation of Assignment Document (Assignor: F'Real Foods, LLC; Assignee: Rich Products Corporation)	No Objection
DTX149	5/16/2014	F'REAL_007321	F'REAL_007358	PowerPoint Presentation: "7-Eleven & f'real Partnership" (Paul Gobel, Jens Voges, Michelle Davis, Dan Kukulka)	Authentication Hearsay
DTX150	5/13/2013	F'REAL_008030	F'REAL_008047	PowerPoint Presentation: "f'real - Casey's Financing Model"	No Objection
DTX151		F'REAL_008196	F'REAL_008197	F'Real Promotional Materials: "FRLB4 frozen beverage blender"	Authentication Hearsay Relevance
DTX152	4/28/2014	F'REAL_009114	F'REAL_009138	PowerPoint Presentation: "2015 Flavor Meeting - Wawa"	Hearsay Relevance
DTX153	6/10/2014	F'REAL_009335	F'REAL_009357	PowerPoint Presentation: "2014 Marketing Initiatives Update"	Hearsay Relevance
DTX154	10/1/2014	FREAL_012087; F'REAL_012113	F'REAL_012127	Email (with attachment) from J. Voges to S. Braithwaite re 2015 Budget Template	Authentication Hearsay Relevance

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DTX155	6/6/2013	F'REAL_012520	F'REAL_012522	Email chain between J. Voges, W. Hartley, S. Braithwaite, et al. re Competition for f'real.....And much, much more	Authentication Hearsay Relevance
DTX156		F'REAL_094845	F'REAL_094848	Hamilton Beach Promotional Materials	Authentication Hearsay Relevance
DTX157		F'REAL_094923	F'REAL_094926	Hamilton Beach Promotional Materials	Authentication Hearsay Relevance
DTX158	12/12/2013	F'REAL_096116	F'REAL_096116	Email chain between J. Voges, D. Guzdar, D. Kukulka, "blending@freal.com," J. Greenberg re As Smoothie Store Sales Slow, Jamba Juice Turns to Machines - Businessweek	Authentication Hearsay Relevance
DTX159	3/11/2014	F'REAL_096439	F'REAL_096447	PowerPoint Presentation - "f'real Foods - MBR Update"	Authentication Hearsay Relevance
DTX160	6/25/2014	F'REAL_096799	F'REAL_096799	Email chain between M. Davis, B. Sweitzer, J. Voges, P. Gobel, D. Guzdar re Good News - Hershey's Shake Shop	Hearsay Relevance
DTX161	7/15/2014	F'REAL_096882	F'REAL_096882	Email chain between B. Sweitzer, J. Voges, T. Curtis re Hershey's Incentive Payment	Authentication Hearsay Relevance
DTX162	7/25/2014	F'REAL_096935	F'REAL_096935	Email chain between B. Sweitzer, J. Voges re Hershey Visit	Authentication Hearsay Relevance
DTX163	5/14/2014	F'REAL_097560	F'REAL_097562	Email chain between D. Guzdar, J. Voges, D. Kukulka, et al. re Business Ideas Wanted! Deadline: Friday, May 9	Authentication Hearsay Relevance
DTX164	12/16/2014	F'REAL_097951	F'REAL_097952	Email chain between J. Voges, D. Guzdar, "blending@freal.com" re November Financial KPI's	Authentication Hearsay Relevance
DTX165	2/11/2013	F'REAL_098951	F'REAL_098951	Email from F. Arinci to P. Gobaal, M. Davis, B. Robinson, et al. re Hamilton Beach SS.pptx	Authentication Hearsay Relevance
DTX166	2/11/2013	F'REAL_098952	F'REAL_098953	PowerPoint Presentation - Hamilton Beach Blend in Cup Systems (attachment to F'REAL_098951)	Authentication Hearsay Relevance
DTX167	10/25/2013	F'REAL_099283	F'REAL_099283	Email from D. Guzdar to T. Curtis, J. Greenberg, J. Voges re B6 Decisions Today	Authentication Hearsay
DTX168	10/10/2012	F'REAL_108167	F'REAL_108167	Email from J. Farrell to "blending@freal.com," J. Huang re Blenders	Authentication Hearsay Relevance
DTX169	3/12/2014	F'REAL_108969	F'REAL_108969	Email from J. Voges to P. Gobel re Hershey's access	Authentication Hearsay Relevance

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DTX170	4/6/2011	F'REAL_110998	F'REAL_111019	PowerPoint Presentation: "2012 Product Plan"	Authentication Hearsay Relevance
DTX171	7/5/2012	F'REAL_111864	F'REAL_111865	Email from B. Wagner to J. Farrell re Update	Authentication Hearsay Relevance
DTX172	8/16/2012	F'REAL_111989	F'REAL_111990	Email chain between P. Garcia, B. Wagner, J. Farrell re General Mills update	Authentication Hearsay Relevance
DTX173	5/23/2013	F'REAL_123381	F'REAL_123382	Email chain between J. Voges, A. Geppert, D. Guzdar, et al. re cups/day record	Authentication Hearsay Relevance
DTX174	4/24/2012	FREAL_111568	FREAL_111568	Email chain between P. Garcia, J. Farrell re A couple names...	Hearsay Relevance
DTX175	6/26/2014	F'REAL_127161	F'REAL_127164	Email chain between P. Buckingham, D. Guzdar, "Freal Staff" re It's the cups stupid!	Authentication Hearsay Relevance
DTX176	11/20/2014	F'REAL_128051	F'REAL_128053	Email chain between D. Kukulka, D. Guzdar, N. McBrayer, J. Delaplane re C&U Rental TEST - Sodexo Only	Authentication Hearsay
DTX177	6/7/2014	F'REAL_134246	F'REAL_134251	Email chain between E. Saez, J. Voges, et al. re Competitors...	No Objection
DTX178		F'REAL_136090	F'REAL_136090	Spreadsheet - B4 vs B@ May-13 to Apr-14	Authentication Hearsay Relevance
DTX179	10/3/2014	F'REAL_136629	F'REAL_136630	Email chain between D. Guzdar, D. Kukulka, J. Voges, et al. re Hershey's Document	Authentication Hearsay Relevance
DTX180	9/26/2014	F'REAL_139796	F_REAL_139847	PowerPoint Presentation: "f'real Strategic Growth Plan aka \$500M Project Company-wide Update"	Authentication Hearsay Relevance
DTX181	1/8/2013	F'REAL_140964	F'REAL_140964	Email from S. Williams to J. Voges re patent status	Authentication Hearsay Relevance
DTX182	10/10/2013	F'REAL_144104	F'REAL_144107	Email chain between P. Gobel, J. Greenberg, J. Voges, et al. re Hamilton Beach SS.PPTX	Hearsay Relevance
DTX183	6/10/2010	F'REAL_144115	F'REAL_144115	Letter from H. Wood to f'REAL Foods, LLC CEO re potential patent infringement	Authentication Hearsay Relevance
DTX184		F'REAL_153395	F'REAL_153398	FAQ's re f'real Foods/Rich Products transition	Authentication Hearsay Relevance
DTX185	1/13/2011	F'REAL_163890	F'REAL_163890	Appointment from J. Huang to J. Farrell re Call and webex with Ron Star and Peter Mikhail and Will and Hamilton Beach	Authentication Hearsay Relevance

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DTX186	1/11/2011	F'REAL_173024	F'REAL_173024	Email from J. Huang to R. Star, P. Mikhail, J. Farrell, T. Sevilla, W. Hartley re Thursday's call with Hamilton Beach	Authentication Hearsay Relevance
DTX187	2/25/2011	F'REAL_174527	F'REAL_174529	Email chain between W. Hartley, P. Mikhail, H. Wood, J. Farrell re Hamilton Beach & F'Real Discussion Followup	Authentication Hearsay Relevance
DTX188	11/19/2012	F'REAL_180030	F'REAL_180078	PowerPoint Presentation: "f'real Transition Plan (Preliminary)	Hearsay Relevance
DTX189	11/20/2013	F'REAL_225503	F'REAL_225503	Email chain between D. Guzdar, P. Gobel, B. Robinson re Hershey's Did Not Participate at OUTLOOK Last Week	Hearsay Relevance
DTX190		F'REAL_226396	F'REAL_226396	Spreadsheet - f'Real Payout/Growth Scenarios	Hearsay Relevance
DTX191		F'REAL_235776	F'REAL_235776	Spreadsheet re f'real/Hershey sales and business	Authentication Hearsay
DTX192	7/22/2014	F'REAL_236386	F'REAL_236497	PowerPoint Presentation: "f'real Strategic Growth Plan Phase 1: Situation Analysis & Initial Growth Scenario Development - Rich's eTeam Review"	Hearsay Relevance
DTX193		F'REAL_243270	F'REAL_243270	Spreadsheet re f'real blender & vendors with comments	Authentication Hearsay Incorrect Description
DTX194		F'REAL_243272	F'REAL_243272	Spreadsheet re Blender Unit Sales & Margins	Authentication Hearsay Incorrect Description
DTX195		F'REAL_244950	F'REAL_244950	Spreadsheet re Deliveries	Authentication Hearsay Incorrect Description
DTX196		F'REAL_244951	F'REAL_244951	Spreadsheet re Equipment Orders	Authentication Hearsay Incorrect Description
DTX197		F'REAL_244952	F'REAL_244952	Spreadsheet re Blenders in Convenience Stores	Authentication Hearsay Incorrect Description
DTX198	8/23/2012	F'REAL_244953	F'REAL_244953	Spreadsheet re Sales/Revenue (2007-2011)	Authentication Hearsay Incorrect Description
DTX199		F'REAL_245057	F'REAL_245057	Spreadsheet re Revenue/Sales Adjustment/Cost of Goods Sold	Authentication Hearsay Incorrect Description
DTX200		F'REAL_245058	F'REAL_245058	Spreadsheet re Revenue	Authentication Hearsay Incorrect Description
DTX201		F'REAL_245059	F'REAL_245059	Spreadsheet re Revenue	Authentication Hearsay Incorrect Description

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DTX202	1/15/2013	F'REAL_245075	F'REAL_245075	Spreadsheet re Revenue (Acquisition Costs)	Authentication Hearsay Incorrect Description
DTX203				Excerpts from <i>Freedom in Machinery</i> (Volume 1 (1984) and Volume 2 (1990) Combined) by J. Phillips	Authentication Hearsay Relevance
DTX204	1/1/2008			PowerPoint Presentation: "FUNdaMENTALS of Design Topic 3 - FUNdaMENTAL Principles" by Alexander Slocum	Authentication Hearsay Relevance
DTX205	10/7/2003			U.S. Patent No. 6,629,466 (Grote et al.)	Relevance
DTX206	12/11/2007			U.S. Design Patent No. D557,147 S (Geppert et al.)	Relevance
DTX207	8/4/2016			U.S. Patent Application Publication No. US 2016/0220069 A1 (Gardner et al.)	Relevance
DTX208	4/15/2002	KABLOOE_000121	KABLOOE_000121	Kablooe Design Estimate to F'Real Foods	Hearsay Relevance
DTX209	2/27/2014	F'REAL_145951	F'REAL_145954	Email chain between D. Guzdar, S. Williams, P. Gobel, J. Voges re Hershey Ice Cream "Shake Shop Express" Program update/in roads	Hearsay Relevance
DTX210	2/21/2014	F'REAL_226571	F'REAL_226575	Email chain between D. Guzdar, P. Gobel, M. Davis, et al. re Hershey "Shake Shop" Program	Hearsay Relevance
DTX211	7/7/2014	F'REAL_134551	F'REAL_134553	Email chain between D. Guzdar, E. Saez, J. Voges re Hershey's shake program	Hearsay Relevance
DTX212	9/12/2014	F'REAL_097817	F'REAL_097817	Appointment from D. Guzdar to J. Voges, A. Lewin, P. Gobel, D. Kukulka re Hershey's: competitive response plan for Sales	Authentication Hearsay Relevance
DTX213	9/15/2014	F'REAL_109357	F'REAL_109357	Email chain between J. Voges, D. Kukulka, W. Barth, D. Guzdar re Hershey shakes in the Detroit airport	Authentication Hearsay Relevance
DTX214	2/7/2014	F'REAL_156165	F'REAL_156165	Email from J. Voges to P. Gobel, D. Guzdar re Hershey's	Hearsay Relevance
DTX215	10/9/2014	F'REAL_234219	F'REAL_234219	Email from D. Guzdar to R. Ferranti re Quick update from NACS	Hearsay Relevance
DTX216	12/30/2014	F'REAL_150971	F'REAL_150971	Email from D. Guzdar to J. Voges re The Manitowoc Company Urged to Spin Off Foodservice Division - CSPnet	Authentication Hearsay Relevance
DTX217	9/16/2014	RPC002222	RPC002223	Email from D. Guzdar to R. Ferranti re Revised 2014 Ask.xlsx	Hearsay Relevance
DTX218	4/7/2014	F'REAL_099702	F'REAL_099703	Email chain between D. Guzdar, J. Greenberg, P. Gobel, et al. re Cold Cow	Authentication Hearsay
DTX219	12/3/2013	FREAL_108863	FREAL_108865	Email chain between J. Voges, D. Guzdar, S. Williams, P. Gobel re Hershey's Shake Shop - Follow Up	Authentication Hearsay Relevance
DTX220	10/8/2013	F'REAL_131520	F'REAL_131520	Email from D. Guzdar to J. Voges re I spoke to Jen	Authentication Hearsay

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DTX221	3/7/2018			Form 10-K - Hamilton Beach Brands Holding Company	Authentication Hearsay Misleading Relevance
DTX222				HBB Source Code - GM42_Blend_Prog	Authentication Hearsay Misleading Relevance
DTX223				HBB Source Code - Macro	Authentication Hearsay Misleading Relevance
DTX224	3/30/2011	HBBF0000666	HBBF0000670	PowerPoint Presentation: "Hamilton Beach Mix in Cup for Hershey's Ice Cream"	Authentication Hearsay Relevance
DTX225	1/29/2014	HBBF0000671	HBBF0000684	Purchase and Distribution Agreement between Hamilton Beach Brands and Hershey Creamery Company	Hearsay Relevance
DTX226		HBBF0003638	HBBF0004428	Hamilton Beach Brands, Inc. Type GM42 Blender Module and Stand-Alone Blend-in-Cup and GX01 Ice Shaver Issues List	Authentication Hearsay Relevance
DTX227		HBBF0013126	HBBF0013159	Consolidated Financial Statements - Hamilton Beach Brands, Inc. and Subsidiaries - Years Ended December 31, 2010 and 2009 with Report of Independent Registered Public Accounting Firm (Ernst & Young)	Authentication Hearsay Relevance
DTX228		HBBF0013160	HBBF0013195	Consolidated Financial Statements - Hamilton Beach Brands, Inc. and Subsidiaries - Years Ended December 31, 2012 and 2011 with Report of Independent Registered Public Accounting Firm (Ernst & Young)	Authentication Hearsay Relevance
DTX229		HBBF0020302	HBBF0020302	Spreadsheet - UI Input Project Info	Authentication Hearsay Misleading Relevance
DTX230		HBBF0021463	HBBF0021463	Control Program for MIC2000	Authentication Hearsay Relevance
DTX231	3/7/2012	HBBF0021797	HBBF0021798	Email chain between B. O'Flynn, A. Blackmon, B. Williams, et al. re agenda for tomorrow	Hearsay Relevance
DTX232		HBBF0021831	HBBF0021832	Material Specification - Turcon MF4 (Trellborg Sealing Solutions)	Authentication Hearsay Misleading Relevance
DTX233	8/19/2014	HBBF0036724	HBBF0036748	U.S. Patent No. 8,807,823 (Williams et al.)	Authentication Relevance

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DTX234	3/27/2009	HBBF0171457	HBBF0171465	HBB Business Case Summary - Phase 3 (Blend in Cup - Cornelius)	No Objection
DTX235		HBBF0172789	HBBF0172789	Video - Demonstration of Shake Shop Express machine	Authentication Hearsay Incomplete Misleading Relevance
DTX236	7/25/2018	HBBF0172790	HBBF0172790	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX237	7/25/2018	HBBF0172791	HBBF0172791	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX238	7/25/2018	HBBF0172792	HBBF0172792	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX239	7/25/2018	HBBF0172793	HBBF0172793	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX240	7/25/2018	HBBF0172794	HBBF0172794	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX241	7/25/2018	HBBF0172795	HBBF0172795	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX242	7/25/2018	HBBF0172796	HBBF0172796	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX243	7/25/2018	HBBF0172797	HBBF0172797	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX244	7/25/2018	HBBF0172798	HBBF0172798	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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DTX245	7/25/2018	HBBF0172799	HBBF0172799	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX246	7/25/2018	HBBF0172800	HBBF0172800	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX247	7/25/2018	HBBF0172801	HBBF0172801	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX248		HBBF0172802	HBBF0172802	Video - Demonstration of Shake Shop Express machine	Authentication Hearsay Incomplete Misleading Relevance
DTX249	7/25/2018	HBBF0172803	HBBF0172803	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX250	7/25/2018	HBBF0172804	HBBF0172804	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX251	7/25/2018	HBBF0172805	HBBF0172805	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX252	7/25/2018	HBBF0172806	HBBF0172806	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX253	7/25/2018	HBBF0172807	HBBF0172807	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX254	7/25/2018	HBBF0172808	HBBF0172808	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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DTX255	7/25/2018	HBBF0172809	HBBF0172809	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX256	7/25/2018	HBBF0172810	HBBF0172810	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX257	7/25/2018	HBBF0172811	HBBF0172811	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX258	7/25/2018	HBBF0172812	HBBF0172812	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX259	7/25/2018	HBBF0172813	HBBF0172813	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX260	7/25/2018	HBBF0172814	HBBF0172814	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX261	7/25/2018	HBBF0172815	HBBF0172815	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX262	7/25/2018	HBBF0172816	HBBF0172816	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX263	7/25/2018	HBBF0172817	HBBF0172817	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX264	7/25/2018	HBBF0172818	HBBF0172818	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX265	7/25/2018	HBBF0172819	HBBF0172819	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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DTX266	7/25/2018	HBBF0172820	HBBF0172820	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX267	7/25/2018	HBBF0172821	HBBF0172821	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX268	7/25/2018	HBBF0172822	HBBF0172822	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX269	7/25/2018	HBBF0172823	HBBF0172823	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX270	7/25/2018	HBBF0172824	HBBF0172824	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX271	7/25/2018	HBBF0172825	HBBF0172825	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX272	7/25/2018	HBBF0172826	HBBF0172826	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX273	7/25/2018	HBBF0172827	HBBF0172827	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX274	7/25/2018	HBBF0172828	HBBF0172828	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX275	7/25/2018	HBBF0172829	HBBF0172829	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX276	7/25/2018	HBBF0172830	HBBF0172830	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX277	7/25/2018	HBBF0172831	HBBF0172831	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX278	7/25/2018	HBBF0172832	HBBF0172832	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX279	7/25/2018	HBBF0172833	HBBF0172833	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX280	7/25/2018	HBBF0172834	HBBF0172834	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX281	7/25/2018	HBBF0172835	HBBF0172835	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX282	7/25/2018	HBBF0172836	HBBF0172836	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX283	7/25/2018	HBBF0172837	HBBF0172837	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX284	7/25/2018	HBBF0172838	HBBF0172838	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX285	7/25/2018	HBBF0172839	HBBF0172839	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX286	7/25/2018	HBBF0172840	HBBF0172840	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX287	7/25/2018	HBBF0172841	HBBF0172841	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX288	7/25/2018	HBBF0172842	HBBF0172842	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX289	7/25/2018	HBBF0172843	HBBF0172843	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX290	7/25/2018	HBBF0172844	HBBF0172844	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX291	7/25/2018	HBBF0172845	HBBF0172845	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX292	7/25/2018	HBBF0172846	HBBF0172846	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX293	7/25/2018	HBBF0172847	HBBF0172847	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX294	7/25/2018	HBBF0172848	HBBF0172848	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX295	7/25/2018	HBBF0172849	HBBF0172849	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX296	7/25/2018	HBBF0172850	HBBF0172850	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX297	7/25/2018	HBBF0172851	HBBF0172851	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX298		HBBF0172852	HBBF0172852	Video - Demonstration of Shake Shop Express machine	Authentication Hearsay Incomplete Misleading Relevance
DTX299	7/25/2018	HBBF0172853	HBBF0172853	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX300	7/25/2018	HBBF0172854	HBBF0172854	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX301	7/25/2018	HBBF0172855	HBBF0172855	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX302	7/25/2018	HBBF0172856	HBBF0172856	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX303	7/25/2018	HBBF0172857	HBBF0172857	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX304	7/25/2018	HBBF0172858	HBBF0172858	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX305	7/25/2018	HBBF0172859	HBBF0172859	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX306	7/25/2018	HBBF0172860	HBBF0172860	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX307	7/25/2018	HBBF0172861	HBBF0172861	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX308	7/25/2018	HBBF0172862	HBBF0172862	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX309	7/25/2018	HBBF0172863	HBBF0172863	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX310	7/25/2018	HBBF0172864	HBBF0172864	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX311	7/25/2018	HBBF0172865	HBBF0172865	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX312	7/25/2018	HBBF0172866	HBBF0172866	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX313	7/25/2018	HBBF0172867	HBBF0172867	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX314		HBBF0172868	HBBF0172868	Video - Demonstration of Shake Shop Express machine	Authentication Hearsay Incomplete Misleading Relevance
DTX315	7/25/2018	HBBF0172869	HBBF0172869	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX316	7/25/2018	HBBF0172870	HBBF0172870	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX317	7/25/2018	HBBF0172871	HBBF0172871	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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DTX318	7/25/2018	HBBF0172872	HBBF0172872	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX319	7/25/2018	HBBF0172873	HBBF0172873	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX320		HBBF0172874	HBBF0172874	Video - Demonstration of Shake Shop Express machine	Authentication Hearsay Incomplete Misleading Relevance
DTX321		HBBF0172875	HBBF0172875	Video - Demonstration of Shake Shop Express machine	Authentication Hearsay Incomplete Misleading Relevance
DTX322	7/25/2018	HBBF0172876	HBBF0172876	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX323	7/25/2018	HBBF0172877	HBBF0172877	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX324	7/25/2018	HBBF0172878	HBBF0172878	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX325	7/25/2018	HBBF0172879	HBBF0172879	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX326	7/25/2018	HBBF0172880	HBBF0172880	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX327	7/25/2018	HBBF0172881	HBBF0172881	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX328	7/25/2018	HBBF0172882	HBBF0172882	Photograph of A. Slocum Testing of Shake Shop Express machine	Authentication Hearsay Misleading Relevance
DTX329	2/28/2019			Website Printout - "The First Hands-Free BLIZZARD Machine Custom Designed for Dairy Queen"	Authentication Hearsay Misleading Not Produced Relevance
DTX330		HBBF0015628	HBBF0015628	Technical Drawings - MIC2000 Cup Holder	Authentication Hearsay Incomplete Misleading Relevance
DTX331		HBBF0015650	HBBF0015650	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX332		HBBF0015549	HBBF0015549	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX333		HBBF0015550	HBBF0015550	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX334		HBBF0016212	HBBF0016212	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX335		HBBF0015328	HBBF0015328	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX336		HBBF0015301	HBBF0015301	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX337		HBBF0016546	HBBF0016546	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX338		HBBF0016547	HBBF0016547	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX339		HBBF0015231	HBBF0015231	CAD Drawing - SolidWorks 2001 Assembly	Authentication Hearsay Incomplete Misleading Relevance
DTX340		HCC_004657	HCC_004687	PowerPoint Presentation: "Hershey's Ice Cream and Harold Levinson Associates - A profitable partnership"	Authentication Hearsay Misleading Relevance
DTX341	3/18/2015	HCC_004969	HCC_004689	Q/A - Shake Machine Questions	Authentication Hearsay Relevance
DTX342		HCC_017706	HCC_017711	Spreadsheet - Hershey Creamery Company Company Selling Expense For the Twelve Months Ending Sunday, December 31, 2017	Authentication Hearsay Relevance
DTX343		HCC_017712	HCC_017719	Spreadsheet - Hershey Creamery Company Company Selling Expense For the Twelve Months Ending Wednesday, December 31, 2014	Authentication Hearsay Relevance
DTX344		HCC_017720	HCC017727	Spreadsheet - Hershey Creamery Company Company Selling Expense For the Twelve Months Ending Saturday, December 31, 2016	Authentication Hearsay Relevance
DTX345		HCC_017739	HCC_017740	Milkshake Display Cabinets Depreciation Summary	Authentication Hearsay Relevance
DTX346	7/24/2013	HCC_017741	HCC_017741	Milkshake Machine Filler Depreciation Summary	Authentication Hearsay Relevance
DTX347	3/7/2012	HCC_021570	HCC_021572	HIC and HBC Meeting Notes	Authentication Hearsay Relevance
DTX348	4/29/2011	HCC_025100	HCC_025100	Email from Z. Waite to B. O'Flynn, G. Holder, T. Ryan re agenda for tomorrow	Authentication Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX349		HCC_025576	HCC_025576	Letter from Tate & Lyle to Z. Waite re samples for Ice Cream for Milkshake (EB 19246-300)	Authentication Hearsay Relevance
DTX350		HCC_027247	HCC_027247	Spreadsheet - Fixed Assets - MILKSHAKE	Authentication Hearsay Relevance
DTX351	3/15/2011	HCC_027250	HCC_027250	Spreadsheet - Fixed Assets	Authentication Hearsay Relevance
DTX352	2/26/2019	HCC_003153	HCC_003153	Email from B. Branson to Z. Waite, B. O'Flynn, B. Williams re Any luck	Authentication Hearsay Relevance
DTX353	2/26/2019			Website Printout - Hershey's Ice Cream - About Us	Authentication Hearsay Not Produced Relevance
DTX354				Website Printout - Hershey's Ice Cream - Interested in Selling Hershey's Ice Cream?	Authentication Hearsay Not Produced Relevance
DTX355				Video - Hershey's Ice Cream Shake Shop Express Installation Information (https://www.youtube.com/watch?v=GKZmxM5PpEE)	Authentication Hearsay Not Produced Relevance
DTX356				Video - Hershey's Ice Cream Shake Shop Express (https://www.youtube.com/watch?v=VXiZBFNBV0o)	Authentication Hearsay Not Produced Relevance
DTX357	6/15/2012			<i>Machines and Mechanism - Applied Kinematic Analysis</i> (Fourth Edition) by David H. Myszka	Authentication Hearsay Not Produced Relevance
DTX358	6/28/2012	RPC004813	RPC004820	Email from M. Jones to J. Deuschle, et al. re f'Real Foods Valuation (with attachment)	Hearsay Relevance
DTX359	10/4/2012	RPC002364	RPC002364	Email chain between B. Gisell, K. Malchoff, M. Kliener, et al. re f'real - recommendation	Authentication Hearsay Relevance
DTX360	7/7/2014	RPC002414	RPC002414	Email from K. Malchoff to P. Garcia re f'real	Authentication Hearsay Relevance
DTX361		FREAL_100229	FREAL_100232	Email from R. Ferranti to D. Guzdar, P. Gobel, J. Voges re FW: Hershey's shake program (with attachment)	Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX362				CV - Mark Peterson	Authentication Hearsay Not Produced Relevance
DTX363	2/26/2019			Video - Milkshake Demo by f'real at SHO West (https://www.youtube.com/watch?v=CuyGoP9eXL0&t=3s)	Authentication Hearsay Not Produced Relevance
DTX364	2/26/2019			Website Printout - Hamilton Beach - Our History	Authentication Hearsay Not Produced Relevance
DTX365	3/6/2019			Website Printout - f'real - Patents	Authentication Hearsay Not Produced Relevance
DTX366				Exhibit III to Peterson Expert Report (Updated) - Summary of Hamilton Beach Reasonable Royalties Under the '150 Patent Family and the '377 Patent	Authentication Expert Report Hearsay Not Produced Relevance
DTX367				Excerpts from Litigation Services Handbook - The Role of the Financial Expert (Fifth Edition) by Roman L. Weil, Daniel G. Lentz, David P. Hoffman	Authentication Hearsay Not Produced Relevance
DTX368	9/1/2005			Excerpts from Basic Economics - A Citizen's Guide to the Economy (Revised and Expanded Edition) by Thomas Sowell	Authentication Hearsay Not Produced Relevance
DTX369				Worthless Patents, by Kimberly A. Moore, from Berkeley Technological Law Journal, Volume 20, Issue 4	Authentication Hearsay Not Produced Relevance
DTX370	11/13/2002			Excerpts from Precision Machine Design, by Alexander H. Slocum, Prentice-Hall, 1992	Authentication Hearsay Not Produced Relevance
DTX371	11/13/2002	RPC000023	RPC000083	Agreement and Plan of Merger Among f'Real Foods, LLC, Rich Products Corporation, RPC Revolution, LLC and Fortis Advisors LLC, as Members' Representative	Authentication Hearsay Relevance
DTX372	11/13/2002	RPC000203	RPC000361	Exhibit D - Company Disclosure Schedule	Authentication Hearsay Relevance

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Trial Ex. No.	Doc Date	Begin Bates	End Bates	Description	Plaintiffs' Objections
DTX373	10/11/2012	RPC000718	RPC000718	Schedule I - Capital Interest Pro Rata Share	Authentication Hearsay Relevance
DTX374		RPC000798	RPC000830	PowerPoint Presentation: "Project Revolution Update"	Authentication Hearsay Relevance
DTX375	9/8/2014	RPC001951	RPC001951	Email from D. Guzdar to R. Ferranti re question	Authentication Hearsay Relevance
DTX376	6/25/2012	RPC002206	RPC002217	PowerPoint Presentation: "f'real Financial Outlook"	Authentication Hearsay Relevance
DTX377	6/29/2012	RPC002355	RPC002355	Email chain between M. Kiener, K. Malchoff, D. Guzdar, et al. re f'real	Authentication Hearsay Relevance
DTX378		RPC002366	RPC002367	Letter from K. Malchoff to P. Garcia (Hadley Partners Incorporated) re Rich Products interest in acquiring f'real Foods LLC	Authentication Hearsay Relevance
DTX379				Video - Hershey's Ice Cream Shake Shop Express (https://www.youtube.com/watch?v=-h7D9d9-S5M)	Authentication Hearsay Not Produced Relevance
DTX380				Hershey Test Data Sheet (Exhibit to Slocum Rebuttal Report)	Authentication Hearsay Not Produced Relevance
DTX381	9/24/2018			Test Report of MIC2000 by Professor Alexander Slocum (Exhibit to Slocum Rebuttal Report)	Authentication Hearsay Not Produced Relevance
DTX382	11/14/2014			Website Printout - Definition of "approximate" by Merriam-Webster	Authentication Hearsay Not Produced Relevance
DTX383	10/28/2013	FREAL_137007	FREAL_137007	Email from J. Voges to jpvoges@gmail.com re Accomplishments	Hearsay Relevance
DTX384	11/5/2014	FREAL_128951	FREAL_128952	Email chain between J. Greenberg, D. Guzdar, T. Curtis, et al. re B6 Decisions Today	Hearsay Relevance
DTX385	9/15/2014	FREAL_133335	FREAL_133338	Email chain between J. Voges, B. Soreo, M. Vitantonio re Potential infringement questions	Hearsay Relevance
DTX386	10/1/2014	FREAL_136561	FREAL_136562	Email chain between D. Kukulka, J. Voges re Hershey's	Hearsay Relevance
DTX387		FREAL_136624	FREAL_136624	Email chain between D. Kukulka, J. Voges, D. Gram re Legal Claim Announcement	Hearsay Relevance

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DTX388				Resume - Jens Voges	Authentication Hearsay Not Produced Relevance
DTX389	2/18/2003	HBBF0000322; HBBF0000438	HBBF0000444	Technical Drawings - MIC Ice Cream Dual Blade Assembly	Authentication Hearsay Relevance
DTX390	11/19/2003	KABLOOE_008503	KABLOOE_008503	Technical Drawing - Prince Castle Inc. ASSM 93 Lower Spindle	Authentication Hearsay Relevance
DTX391	11/19/2003	KABLOOE_008892	KABLOOE_008892	Technical Drawing - Prince Castle Inc. Blending Disk	Authentication Hearsay Relevance
DTX392		KABLOOE_010473	KABLOOE_010474	Technical Drawing - Prince Castle Inc. Blade, Fixed	Authentication Hearsay Relevance
DTX393		FARRELL000004 .0084	FARRELL000004 .0084	Photograph - Blade Assembly	Authentication Hearsay Relevance
DTX394				Physical Exhibit - SmartServe Mix-in-Cup MIC2000 Series Mixer	Objections reserved until review
DTX395				Physical Exhibit - f'real FRLB2 Milk Shake Maker	Objections reserved until review
DTX396				Physical Exhibit - Splash Shield Assembly	Objections reserved until review
DTX397				Physical Exhibit - MIC2000 Blades	Objections reserved until review
DTX398				Website Printout - Hamiton Beach Brands Holding Company About Our Company	Authentication Hearsay Relevance
DTX399	6/13/2002	KABLOOE_000153	KABLOOE_000228	Invoices and Tracking Reports re f'real Foods LLC	Authentication Hearsay Relevance
DTX400		KABLOOE_019638	KABLOOE_019638	F'Real Milk Shake Mixer Project Schedule	Authentication Hearsay Relevance

PRETRIAL ORDER

EXHIBIT 12

Joint Trial Exhibit List

Number (JTX)	Doc Date	Begin Bates	End Bates	Description	Deposition Exhibit
1				U.S. Patent No. 5,803,377	
2				U.S. Patent No. 7,144,150	
3				U.S. Patent No. 7,520,658	
4				U.S. Patent No. 7,520,662	
5		F'REAL_001084	F'REAL_001236	Prosecution History for U.S. Patent No. 5,803,377	
6		HBBF0171508	HBBF0172343	Prosecution History for U.S. Patent No. 5,803,377 (Ex Parte Reexamination)	
7		F'REAL_001237	F'REAL_001374	Prosecution History for U.S. Patent No. 7,144,150	
8		F'REAL_001375	F'REAL_001538	Prosecution History for U.S. Patent No. 7,520,658	
9		F'REAL_001539	F'REAL_001733	Prosecution History for U.S. Patent No. 7,520,662	
10	9/2/2002	FARRELL003052	FARRELL003053	Email from J. Farrell to B. Gray, L. Banovez, A. Geppert re f'REAL Milkshake mixer	
11	4/12/2002	FARRELL003207	FARRELL003211	Notes re Kablooe Meeting, 4/12/02 (with estimate attached)	
12		HBBF0000001	HBBF0000044	Hamilton Beach Brands Documentation Report	BenBranson_26
13		HBBF0000117	HBBF0000123	Product Definition Spec - IMI2000/IMI2000CE	
14		HBBF0000129	HBBF0000136	Product Definition Spec - BIC2000/BIC2000CE	BenBranson_23
15	5/26/2010	HBBF0000651	HBBF0000665	Patent License Agreement between f'REAL! Foods, LLC and Hamilton Beach Brands	

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Number (JTX)	Doc Date	Begin Bates	End Bates	Description	Deposition Exhibit
16	8/1/2014	HBBF0000686	HBBF0000777	Service Manual - SmartServe Drink Mixers (MIC2000, BIC2000)	
17		HBBF0001802	HBBF0001802	CAD Drawing for Cup Shield Assembly	BrianPWilliams_13
18		HBBF0010344	HBBF0010352	Sharp GP2Y0D810Z0F Distance Measuring Sensor Unit Digital output (100mm) type	BrianPWilliams_35
19		HBBF0013196	HBBF0013234	Consolidated Financial Statements - Hamilton Beach Brands, Inc. and Subsidiaries - Years Ended December 31, 2014 and 2013 with Report of Independent Registered Public Accounting Firm (Ernst & Young)	
20	3/1/2014	HBBF0037890	HBBF0037975	Service Manual - SmartServe Drink Mixers (MIC2000, BIC2000)	
21	9/16/2011	HBBF0120251	HBBF0120251	Amendment to Development, Technology and Supply Agreement between IMI Cornelius Inc. and Hamilton Beach Brands	GregHTrepp_15
22	8/10/2011	HBBF0120268	HBBF0120304	Development, Technology and Supply Agreement between IMI Cornelius Inc. and Hamilton Beach Brands	
23		HBBF0171454	HBBF0171454	Spreadsheet - Sales Information for Hamilton Beach Brands Products (Jan. 2015 - Dec. 2018)	MichaelSanford_4
24		HBBF0171455	HBBF0171455	Spreadsheet - Sales Information for Hamilton Beach Brands Products (Jan. 2013 - Dec. 2014)	MarkPeterson_13

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Number (JTX)	Doc Date	Begin Bates	End Bates	Description	Deposition Exhibit
25	3/18/2016	HCC_017494	HCC_017520	Independent Auditor's Report - Hershey Creamery Company Consolidated Financial Statements Years Ended December 31, 2014 and 2013 (Brown Schultz Sheridan & Fritz)	
26	3/27/2017	HCC_017521	HCC_017546	Independent Auditor's Report - Hershey Creamery Company Consolidated Financial Statements Years Ended December 31, 2015 (Brown Schultz Sheridan & Fritz)	
27	3/16/2018	HCC_017547	HCC_017572	Independent Auditor's Report - Hershey Creamery Company Consolidated Financial Statements Years Ended December 31, 2016 (Brown Schultz Sheridan & Fritz)	
28		HCC_017573	HCC_017597	Independent Auditor's Report - Hershey Creamery Company Consolidated Financial Statements Years Ended December 31, 2017 (Brown Schultz Sheridan & Fritz)	
29		HCC_017673	HCC_017673	Spreadsheet re Sales/Profit/Loss (2013-2018)	GeorgeHolder_15
30		HCC_027158	HCC_027158	Spreadsheet - Fixed Assets	GeorgeHolder_23
31		RPC000772	RPC000783	Rich's Global Intellectual Licensing Policy (June, 2015)	
32	1/31/2013	RPC000831	RPC000932	PowerPoint Presentation: "f'real Confidential Memorandum" (Hadley Partners Incorporated)	MichaelPAkemannPhD_12
33	4/10/2014	RPC000933	RPC001036	Rich Products Corporation Valuation of Identified Intangible Assets of f'Real Foods, LLC (Dopkins & Company, LLP)	

PRETRIAL ORDER EXHIBIT 13

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' MOTION IN LIMINE No. 1
TO PRECLUDE JAPANESE UTILITY MODEL
PUBLICATION No. 1992-136787 ("SATO") AS PRIOR ART**

OF COUNSEL:

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Attorneys for Plaintiff

March 26, 2019

Defendants intend to assert at trial that a Japanese Utility Model Application, JP H04-136787 U1¹ (“Sato”), is prior art under 35 U.S.C. § 102 to the ’150, ’658, and ’662 patents because Sato was allegedly published more than one year before the filing date of those patents. Plaintiffs move *in limine* to preclude use of the Sato reference at trial because it fails to meet the “printed publication” requirement of § 102.

“In order for [a printed publication] to be a bar to patentability under § 102(b), it must have been **publicly accessible** more than one year prior” to the filing date of the application of the patent. *In re Lister*, 583 F.3d 1307, 1316 (Fed. Cir. 2009) (emphasis added). “[P]ublic accessibility’ has been called *the touchstone* in determining whether a reference constitutes a ‘printed publication’ bar under 35 U.S.C. § 102(b).” *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194-95 (Fed. Cir. 2008) (emphasis in original), citing *In re Hall*, 781 F.2d 897, 898-99 (Fed. Cir. 1986). “A given reference is ‘publicly accessible’ upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *Id.*, citing *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006); *see also Kyocera Wireless Corp. v. ITC*, 545 F.3d 1340, 1350 (Fed. Cir. 2008) (same).

Here, Defendants have explicitly told this Court that the Sato reference was not publicly accessible to one skilled in the art exercising reasonable diligence. In their opposition to Plaintiffs’ Motion in Limine to Preclude Prior Art Under 35 U.S.C. § 315(e), Defendants told the Court that “the un rebutted evidence shows that a skilled searcher conducting a diligent search—

¹ Defendants also refer to Sato as “Japanese Patent Publication No. 1992-136787 U,” but this is incorrect. Under the Japanese regime for intellectual property, a patent protects “an invention which involves highly advanced and sophisticated technologies,” whereas a utility model is a separate process that is “designed to protect a device related to the shape or construction of articles or combination of articles.” *See* Japan Patent Office, Utility Model FAQ, at <https://www.jpo.go.jp/e/faq/yokuaru/utility.html#anchor7-1>.

such as the ones commissioned by Hamilton Beach—could not reasonably be expected to find the untranslated Japanese Sato utility model reference.” Ex. A, D.I. 194 at 2. Defendants’ statement that even “a *skilled searcher* conducting a diligent search” (*i.e.*, someone with prior art search skills that far exceed a person of ordinary skill in the art), could not locate the Sato reference is ample reason for the Court to determine that the Sato reference does not meet the requirement of being “publicly accessible” to be considered a printed publication under § 102.

To emphasize the lack of public accessibility of Sato, Defendants submitted declarations from their two expert prior art search firms, one of whom states that it utilizes examiners who “are highly educated in their technical field (typically a Master or Ph.D.) and have been trained in patent search and examination for a minimum of 18 months under the mentorship of a senior examiner,” (Ex. B, D.I. 194-2, Neilson Decl. ¶ 6), and another who is a “highly skilled patent searcher” with “22 years of experience performing patent searches” that has taught patent searching to thousands of USPTO examiners (Ex. C, D.I. 194-3, DeMarco Decl. ¶¶ 3-5).

These declarations emphasize that despite an extremely thorough and “exhaustive electronic search” utilizing the very best search techniques and current (ca. 2014-2015) databases, including databases of Japanese patents, these expert searchers were unable to locate the Sato reference. *See* Ex. C, ¶¶ 9-17; Ex. B ¶¶ 5, 9-23. These expert searchers declare, under penalty of perjury, that Sato could not “be found through a reasonably diligent search, let alone the exhaustive prior art search performed by the Norwegian Patent Examiner with over 10 years of patent examination experience,” (Ex. B, ¶ 26), and that “it is not reasonable to expect a skilled searcher to find such a Japanese language Utility Model reference even through the most diligent search” (Ex. C, ¶ 15). Indeed, both expert searchers declare that even when given the exact Sato reference number, it cannot be located in the best search databases. Ex. B, ¶ 24; Ex. C, ¶ 16.

Notwithstanding the unequivocal statements from Defendants and their skilled prior art searchers that Sato was not publicly accessible as of 2014, Defendants must also demonstrate by clear and convincing evidence that Sato would have been publicly accessible back in 2001, more than one year before the effective filing date of the '150, '658, and '662 patents. *See Application of Bayer*, 568 F.2d 1357, 1361-62 (C.C.P.A. 1978) (the “focus of the inquiry” is on when the prior art was available to the public); *see also In re Wyer*, 655 F.2d 221, 227 (C.C.P.A. 1981) (a patent challenger bears the burden of proving that a printed publication was “available and accessible to persons concerned with the art to which the document relates.”).

Defendants cannot have it both ways on public accessibility of the Sato reference. They cannot first tell this Court, when trying to defeat a motion under § 315(e), “that a skilled searcher conducting a diligent search” utilizing the latest search databases and techniques in 2014 “could not reasonably be expected to find the untranslated Japanese Sato utility model reference,” (Ex. A at 2), but then come back now and try to convince the Court that the Sato reference was publicly accessible in 2001 such that “persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *In re Lister*, 583 F.3d at 1316.

* * * *

Because Defendants’ own “highly skilled” prior art search experts have concluded that the Sato reference was not publicly accessible in 2014, let alone in 2001, the Sato reference was not “sufficiently accessible to the public interested in the art” as of the critical date to meet the printed publication requirement of § 102 and Defendants should be precluded from asserting it at trial as prior art to the '150, '658, and '662 patents.

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March 26, 2019

EXHIBIT A

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH
PRODUCTS CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41-CFC
CONSOLIDATED

**DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION IN LIMINE
TO PRECLUDE PRIOR ART UNDER 35 U.S.C. § 315(e)**

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Counsel for Defendants

Dated: January 11, 2019

Defendants oppose Plaintiffs' Motion *in Limine* (D.I. 173). Defendants do not assert prior art combinations that they "raised or reasonably could have raised" during *Inter Partes* Review ("IPR") of U.S. Pat. No. 7,520,662 ("the '662 patent").

1. Defendants Could Not Have Reasonably Raised the Sato Reference in the '662 IPR as Evidenced by Multiple Skilled Searchers' Inability to Find Sato After Diligent Searches

Defendants did not learn about the Sato reference (JP H04-136787 U1) until 7 months after the filing the IPR for the '662 Patent ("the '662 IPR"). Foster Decl. ¶ 7. Thus, the Court's estoppel inquiry is limited to whether the reference could reasonably have been discovered by "a skilled searcher conducting a diligent search." *Parallel Networks Licensing, LLC v. IBM Corp.*, No. 13-2072-KAJ, 2017 WL 1045912, at *11 (D. Del. Feb. 22, 2017) (citation omitted); *Clearlamp, LLC v. LKQ Corp.*, No. 12 C 2533, 2016 WL 4734389, at *7–8 (N.D. Ill. Mar. 18, 2016).

Plaintiffs bear the burden of establishing estoppel. *Clearlamp*, 2016 WL 4734389, at *9. "One way to show what a skilled search would have found would be (1) to identify the search string and search source that would identify the allegedly unavailable prior art and (2) present evidence, likely expert testimony, why such a criterion would be part of a skilled searcher's diligent search." *Id.* Here, Plaintiffs have provided no evidence that the Japanese-language Sato reference would have reasonably been found through a diligent search, and thus Plaintiffs' Motion fails for this reason alone. *See Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 271 F. Supp. 3d 990, 1032-33 (E.D. Wis. 2017) (no estoppel in view of lack of evidence whether a

diligent searcher would have found the references). To the contrary, the un rebutted evidence shows that a skilled searcher conducting a diligent search—such as the ones commissioned by Hamilton Beach—could not reasonably be expected to find the untranslated Japanese Sato utility model reference. Decl. of Lone Hartung Nielsen ¶¶ 4-8, 23-26; Decl. of Dominic M. DeMarco ¶¶ 1-7, 13-17.

In lieu of presenting evidence to satisfy its burden, Plaintiffs note that Sato was found “two months” after the ’662 IPR institution and cite to the PTAB’s comments regarding Sato in a denial of institution for a different patent. D.I. 173 at 2-3. But the time when Sato was found is not evidence that it should have been found through a diligent search. And the PTAB’s decision was based on its broad discretion to deny institution under § 325(d) after Hamilton Beach had the benefit of a prior IPR decision. The PTAB did not analyze estoppel under § 315(e) and whether a diligent search would have found Sato. *See* D.I. 173-2 Ex. B at 11. As the only evidence before the Court shows that a diligent search would not reasonably uncover Sato, Plaintiffs have not met their burden. *See Oil-Dri Corp. of Am. v. Nestlé Purina Petcare Co.*, No. 15-cv-1067, 2017 WL 3278915, at *10 (N.D. Ill. 2017) (no estoppel when plaintiff fails to present evidence that art should have been found in diligent search); *Clearlamp*, 2016 WL 4734389, at *7–9.¹ Accordingly, Plaintiffs’ estoppel argument regarding the Sato reference should be rejected.

¹ Plaintiffs also argue that Sato is “weaker” than or cumulative to the references cited in the IPR. D.I. 173 at 1-2. Not only is this untrue, but this is immaterial as to estoppel and whether it would have been reasonable for a skilled searcher to have found Sato through a diligent search. *Clearlamp*, 2016 WL 4734389, at *9.

2. Estoppel Does Not Apply to APA in View of Kelly and Miller Because This Ground Was Not Instituted by the PTAB in the '662 IPR

The Federal Circuit has held that a defendant is not estopped from asserting invalidity grounds that were raised but not instituted in IPR. *Shaw Indus. Group, Inc. v. Automated Creel Sys.*, 817 F.3d 1293, 1300 (Fed. Cir. 2016). Consistent with *Shaw*, this Court has never held that non-instituted grounds are estopped under § 315(e). Thus, the invalidity ground of Admitted Prior Art (“APA”) in view of Kelly and Miller—which was raised but not instituted in the '662 IPR, and thus not subject to the PTAB’s final written decision—is not subject to IPR estoppel.

Plaintiffs’ reliance on *SiOnyx, LLC v. Hamamatsu Photonics K.K.*, 330 F. Supp. 3d 574, 601 (D. Mass. 2018) is misplaced. In *SiOnyx*, the defendant still had time to appeal non-institution after the Supreme Court’s decision in *SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348 (2018). *Id.*, n.18. Here, the SAS decision issued months after the appeal deadline lapsed. Foster Decl. ¶¶ 10-11. There is also no legal support for the proposition that Hamilton Beach should be estopped for not seeking a remand. Also, the non-binding decision of *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*, No. 12-cv-5501-SI, 2017 WL 235048, at 4 (N.D. Cal. Jan. 19, 2017), does not apply here because the non-instituted ground based on APA is not a mere subset of the instituted '662 IPR combination. Indeed, Defendants’ APA/Kelly/Miller ground uses a distinct primary reference (APA) than the instituted '662 IPR ground. Accordingly, the Court should reject Plaintiffs’ contention that the non-instituted combination based on APA should be estopped under § 315(e).

Dated: January 11, 2019

/s/ Francis DiGiovanni

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Counsel for Defendants

EXHIBIT B

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41-CFC

**DECLARATION OF LONE HARTUNG NIELSEN IN SUPPORT OF
DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION IN LIMINE
TO PRECLUDE PRIOR ART UNDER 35 U.S.C. § 315(e)**

Kunne ikke finde tekst til indholdsfortegnelsen.

1. My name is Lone Hartung Nielsen and I am the Managing Director of the Nordic Patent Institute ("NPI"). I have served in this position since February 2010.

2. The NPI is an intergovernmental partnership between Denmark, Norway and Iceland, and its services draw upon the expertise of patent examiners in the Danish Patent and Trademark Office and the Norwegian Intellectual Property Office.

3. The NPI has been appointed by World Intellectual Property Organization to be a Search and Preliminary Examination Authority for

LHN

International patent applications under the Patent Cooperation Treaty, of which the United States is a member.

4. In addition to performing their duties as the national patent examination authority for Denmark and Norway, these experienced Patent Examiners who are skilled at prior art searching also offer prior art searching to commercial entities.

5. The Examiners use the best international patent databases and non-patent literature databases available, which they also use for their official roles as both an international and national searching authority.

6. The Examiners performing commercial prior art search services are highly educated in their technical field (typically a Master or Ph.D.), and have been trained in patent search and examination for a minimum of 18 months under the mentorship of a senior examiner before being permitted to perform commercial prior art searches for customers.

7. The NPI was asked to perform a prior art search for U.S. Patent No. 7,520,662 B2 ("the '662 patent") in August 2015.

8. The results of the prior art search for the '662 patent did not include Japanese Utility Model No. H04-136787 U1 to Sato ("the Sato reference").

9. The search was performed using the following patent databases: World Patent Index (WPI), EPODOC, Full text English, German, French databases

in Epoque (The European Patent Office's professional *patent search* tool), Patgransk (Norwegian Patent Publications), and Esp@cenet (free online search tool from the European Patent Office).

10. The WPI database is made by Thomson Reuters and covers published patent applications and granted patents from more than 40 patent organisations. The database covers Belgium, Canada, France, Japan, the Netherlands, Germany, Russia/Soviet Union, South Africa, Switzerland, UK and USA from 1963; Czech Republic, Slovakia, Denmark, Finland, Israel, Hungary, Norway, Portugal, Romania, Austria and Sweden from 1974-75; PCT, EP and Italy from 1976; Brazil from 1976; Australia, and Spain from 1983; Luxembourg from 1984; China from 1987; South Korea from 1986; New Zealand and Taiwan from 1993; Ireland from 1995; the Philippines from 1994; German utility models from 1995; and Mexico from 1997. The database covers the following subjects: pharmaceuticals from 1963; agricultural chemicals from 1965; plastics and polymers from 1966; all other chemicals from 1970; mechanics, electronics and all other technology in general from 1974. The database is updated weekly. The search is performed in the abstracts of the patent/patent application. The abstract is formulated by the producer of the database.

11. The EPODOC database contains classified patent applications/patents from 71 patent organisations. The database covers EP, PCT, OAPI and ARIPO

completely; USA from 1832; and England, France and Germany from approximately 1920. Japan and other European countries are covered from 1971/74 to date. EPODOC contains the database PAJ (Japio) from the Japanese Patent Organisation. The database is updated weekly and the search is performed in the abstract of a patent/patent application filed by the applicant. A citation search in EPODOC covers those documents cited in the subject patent application, as well as the documents cited by the technical examiner. The search also covers patent literature in which the subject document or its family is cited.

12. The search was also performed with the following databases: COMPENDEX, INSPEC, NPL (European Patent Office's Non-patent Literature Database), XPESP (ScienceDirect's journal database), XPI3E, XPIEE, XPAIP, XPIOP, Frosti, FSTA, EPO Registry, Google, and Google Scholar.

13. The Computerized Engineering Index and Ei Engineering Meetings database ("COMPENDEX") contains citations from worldwide engineering and technology. COMPENDEX covers all engineering disciplines including chemical, computer, electrical, civil and mechanical engineering. Sources include journals, books, conference contributions, reports, and non-conventional literature. Bibliographic information and abstracts are searchable. File data from 1960 to present and the database is updated monthly.

14. The Information Service for Physics, Electronics and Computing database (“INSPEC”) contains citations with abstracts to world physics, electronics and electrical engineering, computers and computing, and control theory and technology literature. INSPEC corresponds to physics abstracts, electrical & electronics abstracts, computer and control abstracts, and business automation. Sources for INSPEC include primarily journals, conference proceedings, books, dissertations and reports. Bibliographic information and abstracts are searchable. File data from 1898 and the database are updated weekly.

15. The XPI3E and XPIEE databases contain documents produced by IEEE (Institution of Electrical and Electronic Engineers) in the fields of modern electronics including electronic science and engineering, telecommunications, optoelectronics and optical communication.

16. In the XPAIP database, full text articles from the American Institute of Physics are searchable back to 1995.

17. The XPIOP database contains full text articles from the Institute of Physics within the technical areas: Biomedical materials, Physics, Engineering, Instrumentation, Micro engineering, Optics, Nanotechnology, Nuclear Fusion and Conductors. File data from 1922 to present.

18. The Frosti (Foodline® Science) database is a bibliographic database covering the food and drink industry. The sources are books, conferences,

government documents, journals, patents, reports and standards. File data from 1972 to the present. The database is updated twice a week. The search is performed on abstracts.

19. The FSTA database is a bibliographic database providing coverage of scientific and technological aspects of the processing and manufacturing of human food products. The sources are journals, books, conference proceedings, reports, patents, pamphlets, legislation and dissertations. File data from 1969 to the present and the database is updated weekly. The search is performed on abstracts.

20. These prior art search used the following search terms:

- Mixing, blending
- Liquid, beverage, drink, milkshake, ice cream
- Shield, cover, lid, guard, sleeve
- Nozzle, sprayer, spraying, jet, conduit
- Rinse/rinsing, wash/washing, clean/cleaning, flush/flushing, sanitising, disinfect/ disinfecting

21. The search terms were also used with relevant synonyms and truncations. Relevant cross combinations between classes and keywords have been applied.

22. The search was performed by Ms. Bente Aarum-Ulvås, who has been a Senior Examiner at the Norwegian Industrial Property Office (Patentstyret) since 2008 and was conducted in a diligent matter in accordance with NPI requirements.

Ms. Aarum-Ulvås was awarded a Masters of Science in 2001 and studied semiconductor technology (*e.g.*, solar cells), magnets (*e.g.*, microchips), superconductors, concrete/cement etc., analytical chemistry and basic organic chemistry.

23. Despite the breadth of the search terms and the number of databases searched, a skilled searcher was unable to find the Sato reference.

24. Even when given the number Sato reference, it cannot be found in the World Patent Index.

25. EPODOC includes a citation to the Sato reference but no drawings and text are included in the citation that would indicate the Sato reference is relevant to the '662 patent or could be linked to the search terms.

26. A description of the Sato reference document does not exist in a machine translated form such that it could be found through a reasonably diligent search, let alone the exhaustive prior art search performed by the Norwegian Patent Examiner with over 10 years of patent examination experience.

I hereby declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on January 11, 2019

01-11-19


Lone Hartung Nielsen (LHN)

EXHIBIT C

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41-CFC

**DECLARATION OF DOMINIC M. DEMARCO IN SUPPORT OF
DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION IN LIMINE
TO PRECLUDE PRIOR ART UNDER 35 U.S.C. § 315(e)**

1. My name is Dominic M. DeMarco and I am the Managing Director of DeMarco Intellectual Property, LLC ("DeMarco IP"), which is a full service patent research firm that I founded in 2007. DeMarco IP presently employs 6 full-time patent searchers.

2. Prior to founding DeMarco IP, I worked as the Head Patent Searcher for Epsilon Patent Searching where I lead a team of 6 full-time patent searchers. I was employed at Epsilon from 1997 to 2006.

3. I have over 22 years of experience performing patent searches for businesses and law firms. I have a B.S degree in Chemical Engineering from the

University of Virginia and I have been registered to practice before the U.S. Patent and Trademark Office (“PTO”) since 2001.

4. As a highly skilled patent searcher, I am a regular instructor and former board member of the Patent Information User’s Group (PIUG). Through PIUG, I have taught “Fundamentals of Patent Searching” for the past 9 years and “Fundamentals of (FTO) Searching” to patent professionals for the past 3 years.

5. In 2016 and 2017, the PTO brought me in to provide instruction regarding the Examiner Automated Search Tool (EAST) and Examiner Strategies in 2016-2017 for all 2,000 PTO Examiners of Technology Center 2400.

6. As a skilled and experienced searcher, I was hired to do a diligent prior art search for U.S. Patent No. 7,520,662 B2 (“the ’662 patent”).

7. I completed my search for prior art related to the ’662 patent in December 2014 and I did not find Japanese Utility Model No. H04-136787 U1 to Sato (“Sato”).

8. As Sato was not listed on the ’662 patent, that prior art reference also was not found by the patent applicant or the PTO during the search and examination of the ’662 patent.

9. I performed searches of U.S. and European patents and published patent applications in the following classifications (all documents in a subclass were manually reviewed):

- US Class 366 (Agitating)
 - Subclasses 138, 242, 347, 348
- Cooperative Class A23 (Foods or Foodstuffs; Their Treatment, Not Covered by other Classes)
 - Subclasses G9/30
- Cooperative Class B01 (Physical or Chemical Processes or Apparatus in General)
 - Subclasses F15/00019, F15/00025, F15/00032
- Cooperative Class B29 (Working of Plastics; Working of Substances in a Plastic State, in General)
 - Subclasses B7/404

10. I then performed an exhaustive electronic search for prior art using Boolean and Key Word based searching with the PTO's Examiner Automated Search Tool (EAST) using the US (Issued Patents), US-PGPub (Published U.S. Patent Applications), EP (Europe), JP (Japan), and Derwent (Global database including over 36 million patent families covering more than 100 million patent documents worldwide, with translations) prior art databases.

11. I used the following search terms with EAST (plurals were automatically included):

- (99/348.ccls. 222/413.ccls. 366/197-207,208-335.ccls. 429/519.ccls. A47J43/044.cpc,ipcr. A47J2043/04463.cpc,ipcr.) and (rins\$3 sanitiz\$3 clean\$4)
- (134/104.1,198,200.ccls. B08B3/02\$.cpc,ipcr.) and (blend\$3 mix\$3 emulsif\$4 agit\$3 milkshake ice slushie smoothie food drink beverage).ti, ab

- (B01F015/00.epc,ipc. B08B003/02.epc,ipc.) and (rinse rinsing sanitize cleaning sanitizing) and (mixing mixer mix)
- (mixer blender milkshake auger) and door with (clean cleaning rinse rinsing sanitize sanitizing wash)
- (134/104.1,198,200.ccls.) and (blend\$3 mix\$3 emulsif\$4 agitat\$3 milkshake ice adj cream slushie smoothie)
- rinse with mixer
- (366/197-207.ccls.) and (wash\$3)
- (A47J43/04\$.cpc,ipcr. A47J2043/04\$.cpc,ipcr.) and (clean\$4 wash\$3 rins\$3 sanitiz\$3) with (shield cover lid nozzle spray closure)

12. I reviewed 5,826 hits based on the results my of Boolean and Key Word based searching on EAST.

13. As a skilled searcher with 22+ years of experience, I was unable to find Sato even though I used the same search tools used by PTO Examiners in a wide range of classes and using search terms that are closely tied to the subject matter contained in the specification and claims of the '662 patent.

14. My search using EAST included both the JP and Derwent databases, which include Japanese prior art that is searchable with Classification and English-language keyword searching.

15. Sato is a Japanese Utility Model (the kind code U designates Sato as a Utility Model) that did not include any translation of the abstract, specification, or claims. Thus, it is not reasonable to expect a skilled searcher to find such a

Japanese language Utility Model reference even through the most diligent search because commonly used prior art search tools will not be able to correlate the search terms with Sato in global patent databases.

16. Even having the exact reference number for Sato, it cannot be found in any PTO internal prior art database.

17. I also checked for Sato in a well-known commercial prior art database called Questel Orbit. In that database, Sato has no title, no abstract, no specification, and no translation on which a skilled searcher could use search terms to find Sato.

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on January 10, 2019



Dominic M. DeMarco

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	
)	
)	

**DEFENDANTS' OPPOSITION TO
PLAINTIFFS' MOTION *IN LIMINE* NO. 1**

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Dated: April 2, 2019

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Japanese Utility Model Application JP H04-136787 U (“Sato”) is a quintessential printed publication under § 102.¹ As evidenced by the information on the face of the document, Sato was *published* and made freely available by the Japan Patent Office on December 18, 1992. Ex. A.² Indeed, Article 14(3) of the Japan Utility Model Act requires publication of utility model applications. Ex. B. Additionally, § 901.05 of the Manual of Patent Examining Procedure states that foreign patent documents—such as Sato—are publicly available as of their publication date, and that the publication date for a Japanese utility model application is found in the “upper right corner beneath [the] number” and that date indicates when the document was “laid open and printed.” Ex. C.³

The Federal Circuit and its predecessor have repeatedly held that foreign patent documents are “printed publications.” In the seminal *In re Wyer* decision establishing that a foreign patent application is a “printed publication,” the Court found that an Australian patent application that was “classified and laid open to public inspection at the Australian Patent Office and each of its five ‘sub-offices’” was a printed publication under § 102. 655 F.2d 221, 226 (C.C.P.A. 1981). The court stated that while there was no evidence of any “actual viewing or dissemination of any copy of the application, there is no dispute that the records were maintained for this purpose.” *Id.* Similarly in *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1379 (Fed. Cir. 2006), the

¹ See 35 U.S.C. § 102(b) (“A person shall be entitled to a patent unless . . . the invention was patented or ***described in a printed publication in this or a foreign country*** . . . , more than one year prior to the date of the application for patent in the United States.”) (emphases added).

² Exhibit A includes the Japanese version of Sato, the English translation, and the declaration certifying the translation that were produced by Defendants. Plaintiffs have never disputed the accuracy of this translation.

³ Sato is also a self-authenticating document because it was published by the Japan Patent Office. See Fed. R. Evid. 902(5).

Court held that figures of a Canadian patent application that were only part of the patent file and were not indexed or catalogued qualified as a “printed publication.” The Court, relying on *Wyer*, found that because the resulting Canadian patent was indexed and catalogued, the figures were publicly available as part of the patent file. *Id.* at 1379-80; *see also In re Hall*, 781 F.2d 897, 899-900 (Fed. Cir. 1986) (finding that a single cataloged thesis in a German university library is a “printed publication”); *GlobalFoundries U.S., Inc. v. Zond, LLC*, IPR201-01086, Paper 36, 2015 WL 4934594, at *22-23 (P.T.A.B. Aug. 14, 2015) (finding that a thesis cataloged in a Russian library is a “printed publication”).

Plaintiffs’ argument incorrectly assumes that the standard for whether a reference is subject to IPR estoppel is the same as the standard for determining whether a reference is a “printed publication” under § 102. The standard for IPR estoppel is whether the reference could reasonably have been discovered by “a skilled searcher conducting a diligent search.” *Parallel Networks Licensing, LLC v. IBM Corp.*, No. 13-2072-KAJ, 2017 WL 1045912, at *11 (D. Del. Feb. 22, 2017) (citation and quotations omitted); 35 U.S.C. § 315(e). In this case, despite the fact that it is Plaintiffs’ burden to prove estoppel, the only evidence submitted on this point was provided by Defendants showing that it was reasonable to not find Sato even through two diligent searches. *See* D.I. 194 at 1-2. By contrast, the inquiry into whether a reference is a § 102 “printed publication” is focused on the purpose of § 102—“to prevent withdrawal by an inventor . . . of that which was already in possession of the public.” *Jazz Pharms., Inc. v. Amneal Pharms., LLC*, 895 F.3d 1347, 1355 (Fed. Cir. 2018) (quotations omitted). The crux of the § 102 inquiry is to determine whether a reference has been disseminated or made available to the public. *Id.* Thus, these are two different inquiries with very different purposes. The standard under § 102 is not dependent on what a searcher reasonably can find. *See Freeman v. Minnesota Min. and Mfg. Co.*,

675 F. Supp. 877, 884 n.6 (D. Del. 1987) (“Freeman also introduced evidence that a researcher in the United States could not locate the [Russian] Protocol by using normal research tools. . . . This is irrelevant, because it is established that a foreign publication can be a reference. 35 U.S.C. § 102(b).”).

Under Plaintiffs’ theory, any prior art that was not findable by a reasonable search prior to an IPR ***could never be*** a “printed publication” under § 102. This would result in a complete prohibition against using any patent or printed publication in a district court case following an IPR, eviscerating the “reasonably could have raised” language and the express statutory limit on IPR estoppel. Plaintiff’s theory is thus inconsistent with § 315(e)(2) and the court rulings that have determined that prior art was not subject to estoppel.⁴ Courts have not adopted Plaintiffs’ view of the law, as shown by Plaintiffs’ inability to find any supporting case law.⁵ Thus, the law and the facts show that Sato is a “printed publication,” and Plaintiffs’ Motion *in Limine* should be denied.

⁴ See, e.g., *SiOnyx, LLC v. Hamamatsu Photonics K.K.*, 330 F. Supp. 3d 574, 602-03 (D. Mass. 2018) (allowing defendants to pursue invalidity grounds based on prior art that was not found in search); *Milwaukee Elec. Tool Corp. v. Snap-On, Inc.*, 271 F. Supp. 3d 990, 1032-33 (E.D. Wis. 2017) (same); *Clearlamp, LLC v. LKQ Corp.*, No. 12 C 2533, 2016 WL 4734389, at *9 (N.D. Ill. Mar. 18, 2016) (same).

⁵ None of the cases cited by Plaintiffs uses the § 315(e)(2) standard for a § 102 inquiry, and none pertains to a published foreign patent application.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS
CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and HERSHEY
CREAMERY COMPANY

Defendants.

C.A. No. 16-41-CFC

CONSOLIDATED

**DECLARATION OF FRANCIS DIGIOVANNI IN SUPPORT OF
DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION *IN LIMINE* NO. 1**

¶

I, Francis DiGiovanni, declare:

1. I am a licensed attorney with the law firm of Drinker Biddle & Reath LLP, counsel for defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively "Defendants") in the above-captioned action. I am admitted to practice in this District, I am over 18 years of age, and have personal knowledge of the matters stated in this declaration and would testify truthfully to them if called upon to do so. I submit this declaration in support of Defendants' Opposition to Plaintiffs' Motion *in Limine* No. 1, filed contemporaneously herewith.

2. Attached hereto as Exhibit A is a true and correct copy of Japanese Utility Model Application JP H04-136787 U and its certified English translation.

3. Attached hereto as Exhibit B is a true and correct copy of an excerpt of the Japan Utility Model Act, *available at* <https://wipo.lex.wipo.int/en/text/188379>.

4. Attached hereto as Exhibit C is a true and correct copy of the Manual of Patent Examining Procedure § 901.05 available at <https://www.uspto.gov/web/offices/pac/mpep/s901.html>.

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed this 2nd day of April, 2019, in Wilmington, Delaware.

/s/ Francis DiGiovanni

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DRINKER BIDDLE & REATH LLP

EXHIBIT A

(19)日本国特許庁（J P）

(12) 公開実用新案公報（U）

(11)実用新案出願公開番号

実開平4-136787

(43)公開日 平成4年(1992)12月18日

(51)Int.Cl.⁵

識別記号

庁内整理番号

F I

技術表示箇所

G 0 7 F 13/06

1 0 1

9028-3E

審査請求 有 （全 2 頁）

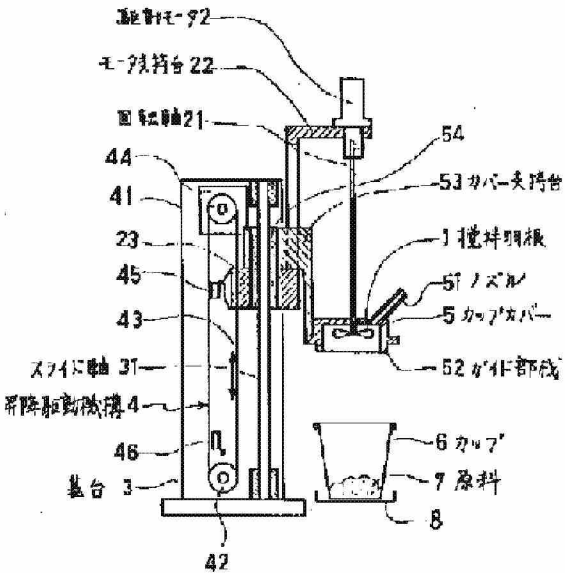
(21)出願番号	実願平4-29443	(71)出願人	000005234
(62)分割の表示	実願昭61-57861の分割		富士電機株式会社
(22)出願日	昭和61年(1986)4月17日		神奈川県川崎市川崎区田辺新田1番1号
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(54)【考案の名称】 カップ式飲料自動販売機の原料攪拌装置

(57)【要約】

【目的】カップ内攪拌方式の原料攪拌装置において、攪拌時にカップにカバーを装着して飲料の溢れを防ぐとともに、カップとカバーの相互の位置合わせを容易にする。

【構成】液体、粉末等の原料7入りカップ6に希釈用水を注入した状態で原料と希釈用水をカップ6内で攪拌して飲料を調合するカップ式飲料自動販売機の原料攪拌装置を、攪拌モータ2の回転軸21の先端に連結した攪拌羽根1と、攪拌モータ2を上下移動可能にガイド支持する基台3と、基台3に装備した攪拌モータ2の昇降駆動機構4と、攪拌モータ2の回転軸21上に攪拌羽根1と同心状に配備したカップカバー5と、カップカバー5の昇降移動手段とを具備して構成する。



(2)

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【実用新案登録請求の範囲】

【請求項1】液体、粉末等の原料入りカップに希釈用水を注入した状態で原料と希釈用水をカップ内で攪拌して飲料を調合するカップ式飲料自動販売機の原料攪拌装置であって、攪拌モータの回転軸先端に連結した攪拌羽根と、前記攪拌モータを上下移動可能にガイド支持する基台と、該基台に装備した攪拌モーター昇降駆動機構と、前記攪拌モータの回転軸上に前記攪拌羽根と同心状に配備したカップカバーと、該カップカバーの昇降移動手段とを具備してなることを特徴とするカップ式飲料自動販売機の原料攪拌装置。

【請求項2】請求項1記載の原料攪拌装置において、カップカバーに希釈用水の注入ノズルが開口していることを特徴とするカップ式飲料自動販売機の原料攪拌装置。

【請求項3】請求項1記載の原料攪拌装置において、カップカバーの周縁部下面にカップへの着地の際にカップに嵌合してカップの位置決めを行なうガイド部材を備えていることを特徴とするカップ式飲料自動販売機の原料攪拌装置。

【図面の簡単な説明】

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【図1】この考案の実施例による原料攪拌装置の待機状態を示す構成図

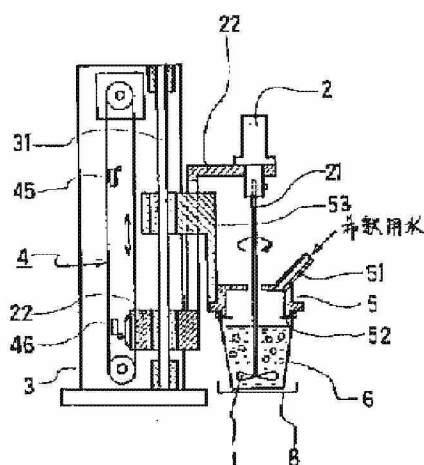
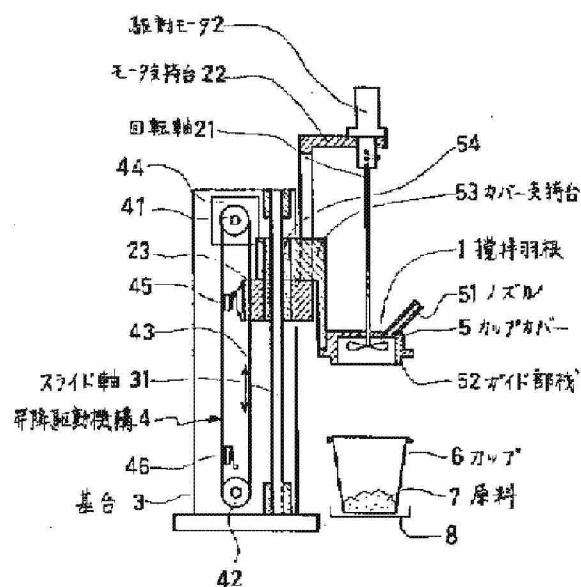
【図2】図1の原料攪拌装置の原料攪拌時の状態を示す構成図

【符号の説明】

- 1 攪拌羽根
- 2 攪拌モータ
- 3 基台
- 4 昇降駆動機構
- 5 カップカバー
- 6 カップ
- 7 原料
- 8 カップ搬送機構
- 21 回転軸
- 22 モーター支持台
- 31 スライド軸
- 51 希釈用水注入ノズル
- 52 ガイド部材
- 53 カバー支持台

【図1】

【図2】



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【考案の詳細な説明】

【0001】

【産業上の利用分野】

この考案は、コーヒー、ココアないしシロップ等の各種粉末、液体原料に湯ないし冷水の希釈用水を加えて攪拌調合したホットないしコールド飲料をカップに入れて販売に供するカップ式飲料自動販売機の原料攪拌装置に関する。

【0002】

【従来技術】

従来におけるこの種のカップ式飲料自動販売機では、販売指令により粉末、液体原料と湯水とを機内のミキシングボール内に搬出し、ここで原料を攪拌して飲料を調合した後に、この飲料をミキシングボールから飲料ホースを通じてベンドステージに搬出されたカップ内に注入するような原料攪拌方式が採用されている。

【0003】

しかしながら、かかる方式のカップ式飲料自動販売機では次記のような問題がある。すなわち飲料の調合、供給過程で、原料攪拌機構のミキシングボールおよびこれに続く飲料ホースの内部には飲料の溶け残り滓が付着残留するために、販売待機時間が長いと時間の経過とともにこの飲料滓に細菌が発生、増殖し、これが次の飲料販売時の際に飲料に混入するという衛生上の問題が派生する。また特にスープのように粘性のある飲料、あるいは具入り味噌汁等を販売する場合は、飲料が流れにくく飲料切れが悪いので系内の付着残留量が多くなる。

【0004】

このために従来では、ミキシングボールおよび飲料ホースを頻繁に洗浄することによって前記問題に対処しているが、この洗浄作業には手間と時間が掛り厄介である他、粘性の高い飲料は系内の付着残留量が多いことから販売を断念せざるを得ない等の販売管理上の問題があった。

一方、上記問題点を解決する販売方式として、あらかじめカップ内に粉末原料入りカップをカップ供給機構に収納して置き、販売指令によりカップ供給機構からベンドステージに搬出した粉末原料入りカップへ直接湯水を注入した上で、該

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カップ内に、モータで回転する攪拌羽根が昇降駆動機構により進入される原料攪拌手段により、粉末原料と湯水を攪拌混合して飲料を調合するようにした販売方式のもの、あるいはカップ供給機構から搬出されたカップを受け取って商品取出口へ機内搬送するカップ搬送機構を具備し、かつカップ搬送過程の途上でカップ内に粉末原料、湯水を順に直接供給した後に、前記方式と同様の原料攪拌手段によりカップ内で粉末原料と湯水を攪拌混合して飲料を調合するようにした販売方式のものが提案されている。

【0005】

この販売方式によれば、カップ内で直接に原料の攪拌を行なうので前記カップ外攪拌方式のミキシングボウル、およびこれに続く飲料ホース等が不要となり、したがって飲料滓の付着残留による衛生上の問題解消に加えて、販売飲料の制限無しにスープ、具入り味噌汁等の販売も可能となる。なお、カップ内に攪拌羽根を進入させる原料攪拌装置を備えたカップ式飲料自動販売機は、例えば実開昭54－95300号公報に開示されている。

【0006】

【考案が解決しようとする課題】

ところで、上記したカップ内攪拌方式では、原料を十分に攪拌調合するために攪拌羽根を勢いよく回転させると、飲料がカップから溢れたり飛散する問題がある。

そこでこの考案は、攪拌羽根を用いたカップ内攪拌方式の実施に即して、攪拌時にカップにカバーを装着して飲料の溢れを防止するとともに、カップとカバーの相互の位置合わせが容易な原料攪拌装置を提供することを目的とする。

【0007】

【課題を解決するための手段】

上記目的を達成するためにこの考案は、原料攪拌装置を、液体、粉末等の原料入りカップに希釈用水を注入した状態で原料と希釈用水をカップ内で攪拌して飲料を調合するカップ式飲料自動販売機の原料攪拌装置であって、攪拌モータの回転軸先端に連結した攪拌羽根と、前記攪拌モータを上下移動可能にガイド支持する基台と、該基台に装備した攪拌モーター昇降駆動機構と、前記攪拌モータの回

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転軸上に前記攪拌羽根と同心状に配備したカップカバーと、該カップカバーの昇降移動手段とを具備してなるように構成する。

【0008】

【作用】

前記の手段によれば、カップを攪拌羽根の直下に位置させたところで昇降駆動機構を下降動作すれば攪拌羽根をカップ内に進入でき、カップカバーは攪拌羽根の回転軸上に同心配備されているので攪拌羽根の下降に合わせてカップカバーを昇降移動手段により降下移動させればカップに対する正しい相対位置を容易に確保してカップの上面を覆うので、攪拌羽根を回転させて飲料を溢れさすことなく十分に攪拌調合できることになる。

【0009】

【実施例】

図1、図2はそれぞれ待機および原料攪拌工程の状態におけるこの考案の実施例による原料攪拌装置の構成を示すものであり、原料攪拌装置は基本的に攪拌羽根1と、攪拌羽根1を駆動する攪拌モータ2と、攪拌羽根1および攪拌モータ2を上下移動可能にガイド支持する基台3と、該基台3に装備して攪拌モータ2を上下移動操作する昇降駆動機構4と、カップカバー5とを主要部品として構成されている。

【0010】

ここで、前記した攪拌羽根1は攪拌モータ2の回転軸21の下部先端に結合されている。一方、攪拌モータ2にはL字形のモータ支持台22が取付けられており、かつその先端が基台3に装備した縦方向のスライド軸31に嵌合して上下移動可能にガイド支持され、さらに該モータ支持台22が後記の昇降駆動機構4の搬送帯に連結結合されている。なお、符号23はモータ支持台22のスライド軸受である。

【0011】

これに対し、カップカバー5は後述する原料各工程で原料入りカップの開口面を蓋するキャップ体であって攪拌モータ2の回転軸21上に遊嵌されて攪拌羽根1と同心状に配備されており、かつカバーの上面には図示されていない温水タンク

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等の希釈用水供給装置にホースを介して接続される希釈用水注入用ノズル51が開口し、さらにカバー周縁部の下面にはカップ上に着地した際にカップの上面に嵌合し合ってその攪拌位置決めを行なうガイド部材52が突出形成されている。またカップカバー5には昇降移動手段としてこの場合、逆L字形のカバー支持台53が取付けてあり、該カバー支持台53の先端が前記したスライド軸31に嵌合してモータ支持台22の上に担持されている。なお54はカバー支持台53のスライド軸受である。

【0012】

また昇降駆動機構4は、上下のプーリ41、42の間に張架して前記スライド軸31と平行に敷設されたベルト、ワイヤ等の搬送帯43と、プーリ41に結合した駆動モータ44と、モータ支持台22の昇降位置を検出する位置検出スイッチ45、46等から構成されている。なお、前記搬送帯の代わりにボールねじ等を採用したねじ送り機構で構成することも可能である。

【0013】

一方、符号6で示すカップはカップ内に粉末等の原料7を収容した状態で符号8で示すカップ搬送機構に受容保持されて機内搬送される。

次に、上記構成による原料攪拌動作に付いて説明する。まず販売待機状態では原料攪拌装置は図1の状態で作機している。すなわちこの待機状態では昇降駆動機構4が上昇位置で停止しており、モータ支持台22、およびカバー支持台53を介して攪拌モータ2およびカップカバー5が上方に待機している。

【0014】

ここで、販売指令により一連の販売動作が開始され、カップ搬送機構8に乗って原料7を収容したカップ6が原料攪拌位置の攪拌羽根1の直下に到達すると、ここで図示されていない運転制御部からの指令により、まず昇降駆動機構4が下降動作してモータ支持台22を下方に移動操作する。これにより攪拌モータ2とともに攪拌羽根1が下降を開始し、その直下に停止しているカップ6の中に上方より進入する。またその下降の停止位置決めは昇降駆動機構4の位置検出スイッチ46の検出信号によって行なわれる。一方攪拌モータ2が下降すると、これに追従する形でカップカバー5がカバー支持台53を介して下降し、そして図2に示

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すようにカップカバー5がカップ6の上面に着地したところでモータ支持台22と切り離れて停止し、カップ6の上面を覆う。これによりカップ6の高さサイズに関係なくカップカバーを正しくカップ上面に着地させることができる。またこの着地の際に、カップカバー5が攪拌羽根1と同心状に配備されているのでカップとの相対位置合わせが自動的に決まり、カバーに形成した前記のガイド部材52が先行してカップ6の上面開口に容易に嵌合し、カップ6を攪拌羽根1の中心に整合させるように修正して正しく位置決めを行なう。なおガイド部材52はカップ6の外周側に嵌合するものであってもよい。このカップ位置決め操作によりカップと攪拌羽根1とが接触し合うのを防ぐことができる。

【0015】

この状態になると、次にカバー5のノズル51を通じて湯、水等の定量の希釈用水がカップ6内に注入され、続いて攪拌モータ2が始動して攪拌羽根1を回転駆動し、カップ6内で原料と希釈用水とを攪拌混合して飲料を調合する。ここで所定の攪拌時間が経過すると攪拌モータ2は停止し、続いて昇降駆動機構4が上昇動作し、モータ支持台22を介して攪拌モータ2とともに攪拌羽根1をカップ6の中から引き上げる。またこの上昇過程でモータ支持台22はカバー支持台53とともにカップカバー5と一緒に引き上げる。そしてモータ支持台22が待機位置まで上昇すると位置検出スイッチ45が作動し昇降駆動機構4が停止する。なおこれら一連の原料攪拌動作は運転制御部よりプログラムされる。一方上記の原料攪拌工程が終了するとカップ搬送機構8が再び移動を開始し、飲料入りのカップ6が商品取出口へ搬出される。

【0016】

なお、前記の原料攪拌工程で、原料攪拌を効果的に行なうために、カップカバー5を押し上げない範囲で攪拌羽根1をカップ6内で上下往復動させるように昇降駆動機構4を運転制御することもできる。また原料攪拌の終了直前で攪拌羽根1をカップから引き上げる際に、攪拌羽根1を回転しつつノズル51を通じて若干の湯をカップカバー5内に注入することにより、攪拌羽根1およびカップカバー5の内壁面を洗浄することができる。

【0017】

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【考案の効果】

以上述べたようにこの考案によれば、攪拌モータの回転軸先端に連結した攪拌羽根と、前記攪拌モータを上下移動可能にガイド支持する基台と、該基台に装備した攪拌モーター昇降駆動機構と、前記攪拌モータの回転軸上に前記攪拌羽根と同心状に配備したカップカバーと、該カップカバーの昇降移動手段とを具備して原料攪拌装置を構成したので、攪拌時にカップにカバーを簡単な構成で位置合わせして装着できるので安価であり、また飲料の溢れがないので勢いよく攪拌調合でき溶け難い原料の飲料も美味しく提供できる。

(12) Public Utility Model Gazette (U)

(19) Japan Patent Office (JP)

(11) Publication Number of Utility Model Application

Utility Model Publication No. 1992-136787(43) Date of publication: **12.18.1992**

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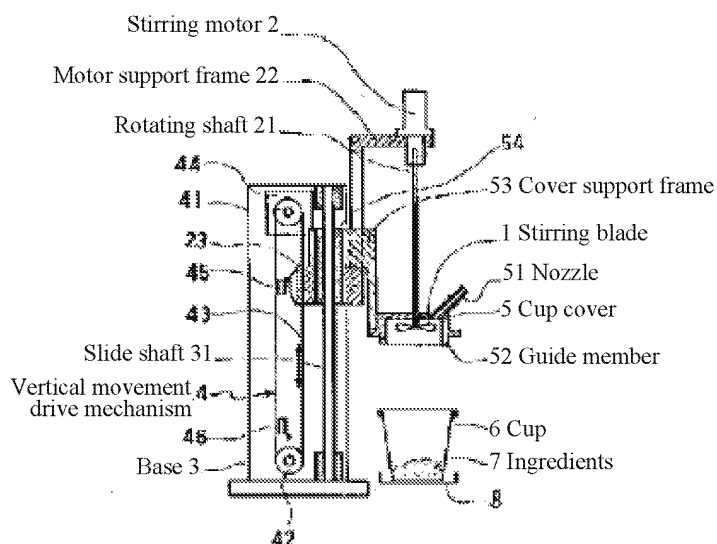
Request for Examination: Requested (Total pages: 2)

(21) Application Number:	Utility Model Application No. 1992-29443	(71) Applicant: 000005234 Fuji Electric Co., Ltd. 1-1 Tanabe Shinden, Kawasaki-ku, Kawasaki, Kanagawa Prefecture, Japan
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(22) Date of Filing:	04.17.1986	(72) Inventor: MAKOTO YOSHIDA c/o Fuji Electric Co., Ltd. 1-1 Tanabe Shinden, Kawasaki-ku, Kawasaki, Kanagawa Prefecture, Japan
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(54) TITLE OF THE UTILITY MODEL: INGREDIENT STIRRING DEVICE FOR CUP TYPE BEVERAGE VENDING MACHINE**(57) ABSTRACT**

<Object> To prevent beverage spills while stirring ingredients, and facilitate mutually aligning a cup and a cover in an ingredient stirring device that stirs ingredients inside a cup.

<Construction> An ingredient stirring device in a cup type beverage vending machine that dispenses a diluent water into a cup 6 containing liquid and/or powder ingredients 7 stirs the ingredients and diluent in the cup 6 to prepare a beverage, the ingredient stirring device including: a stirring blade 1 connected to one end of a rotating shaft 21 on a stirring motor 2; a base 3 that guides and supports the stirring motor 2, allowing the stirring motor 2 to move vertically; a vertical movement drive mechanism 4 mounted to the base 3 for moving the stirring motor 2; a cup cover 5 disposed on the rotating shaft 21 of the stirring motor 2 concentrically with the stirring blade; and a means for moving the cup cover 5 vertically.



CLAIMS

1. An ingredient stirring device in a cup type beverage vending machine that dispenses a diluent water into a cup containing liquid and/or powder ingredients, the ingredient stirring device stirring the ingredients and the diluent to prepare a beverage in the cup, the ingredient stirring device comprising:
 - a stirring blade connected to one end of a rotating shaft of a stirring motor;
 - a base that guides and supports the stirring motor, allowing the stirring motor to move vertically;
 - a vertical movement drive mechanism mounted to the base for moving the stirring motor;
 - a cup cover disposed on the rotating shaft of the stirring motor concentrically with the stirring blade;
 - and
 - a means for moving the cup cover vertically.
2. The ingredient stirring device according to claim 1, wherein the cup cover contains an inlet for a nozzle that dispenses the diluent.
3. The ingredient stirring device according to claim 1, wherein the bottom peripheral surface of the cup cover has a guide member which fits and positions the cup when the cup cover lands on the cup.

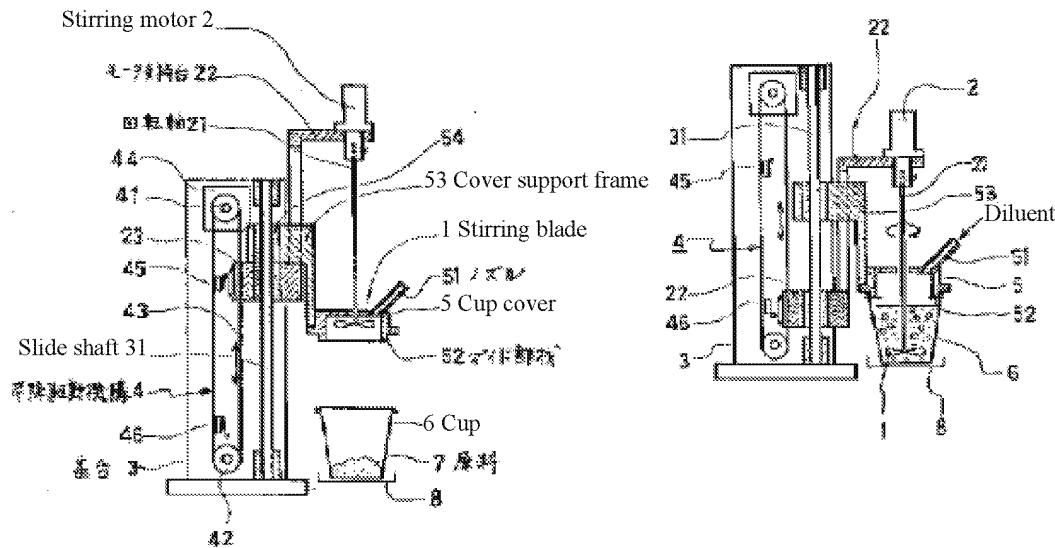
BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a configuration of the ingredient stirring device in standby mode according to an embodiment; and

FIG. 2 shows a configuration of the ingredient stirring device in FIG. 1 while stirring ingredients.

EXPLANATION OF NUMERALS

1. Stirring blade
2. Stirring motor
3. Base
4. Vertical movement drive mechanism
5. Cup cover
6. Cup
7. Ingredient
8. Cup conveyance mechanism
21. Rotating shaft
22. Motor support frame
31. Slide shaft
51. Diluent dispensing nozzle
52. Guide member
53. Cover support frame



DETAILED DESCRIPTION OF THE UTILITY MODEL

<0001>

<**Technical Field**> The present utility model relates to an ingredient stirring device in a cup type beverage vending machine that serves a hot or cold beverage in a cup, more specifically, to cup type beverage vending machines where the beverage is prepared by adding hot or cold diluent water to various kinds of liquid and/or powder ingredients, such as coffee, cocoa, and/or syrup and stirring the same.

<0002>

<**Prior Art**> A conventional cup type beverage vending machine employs an ingredient stirring method wherein, upon receiving a vending command, the cup type vending machine dispenses a powder or liquid ingredient, and hot or cold water into a mixing bowl inside the machine and stirs the contents in the mixing bowl; the prepared beverage is then dispensed from the mixing bowl through a beverage hose into a cup discharged onto a vending stage.

<0003>

A cup type beverage vending machine employing this conventional method, however, has following problems. In the process of preparing and serving a beverage, insoluble residue from a beverage sticks to and remains inside the mixing bowl where the ingredients are stirred, as well as inside the beverage hose from which the beverage is subsequently served. Bacteria can grow and proliferate in the beverage residue over time when the machine is in prolonged standby, and the bacteria may contaminate the next serving of a beverage. This creates a public health issue. When the vending machine serves a viscous beverage such as a thick soup, or a soup with solid ingredients such as miso soup, these beverages tend to flow less freely and are more likely to cause clogs; the amount of the residue stuck in the system increases.

<0004>

These problems are usually addressed by frequently washing the mixing bowl and the beverage hose, but washing requires labor and time and is troublesome; these maintenance challenges have caused some to

give up on serving highly viscous beverages, as viscous beverages lead to a large amount of residue stuck in the system.

Various proposals have thus been made to address the above-described problems; these proposals include the following.

A serving method wherein a cup containing powder ingredients is stored in a cup supplying mechanism. On receiving a vending command, a machine discharges the cup containing powder ingredients onto a vending stage, and dispenses hot or cold water directly into the cup; a motor-rotated stirring blade enters inside the cup via a vertical movement drive mechanism and stirs and mixes the powder ingredients and the hot or cold water to prepare the beverage.

A serving method wherein a vending machine is equipped with a cup transport mechanism which receives a cup discharged from a cup supplying mechanism and transfers the cup through the machine to a product take-out window. The powder ingredients and hot or cold water are dispensed directly into the cup in sequence while the cup is in transit, and the powder ingredients and the hot or cold water are stirred and mixed inside the cup with an ingredient stirring means similar to the above-described method.

<0005>

According to these serving methods, the ingredients are stirred directly inside the cup, eliminating the need for the mixing bowl and the beverage hose and the like used when stirring ingredients outside the cup. This resolves the public health concerns due to the adhesion of beverage residue and removes the limitation on the types of beverages to be served; thus a machine can serve a thick soup, and a soup with solid ingredients, such as miso soup, and the like. The cup type beverage vending machine equipped with the ingredient stirring device wherein the stirring blade enters the cup is disclosed in, for example, Public Utility Model Gazette Publication No. 1979-95300.

<0006>

<Problem to be Solved by the Present Utility Model> With the in-the-cup stirring methods described above, if the stirring blade is rotated vigorously in order to thoroughly mix the ingredients, the beverage spills over or splashes from the cup.

In light of these problems, the goal of the present utility model is, in carrying out the in-a-cup stirring method using a stirring blade, to place a cover on a cup when stirring ingredients and the like to prevent the beverage from spilling out, and to provide an ingredient stirring device that facilitates mutual positioning of a cup and a cover.

<0007>

<Means for Solving Problem> To achieve the above-described object, the present utility model provides an ingredient stirring device in a cup type beverage vending machine that dispenses a diluent into a cup containing liquid and/or powder ingredients, the ingredient stirring device stirring the ingredients and the diluent in the cup to prepare a beverage, the ingredient stirring device including: a stirring blade connected to one end of a rotating shaft of a stirring motor; a base that guides and supports the stirring motor, allowing the stirring motor to move vertically; a vertical movement drive mechanism mounted to the base for moving the stirring motor; a cup cover disposed on the rotating shaft of the stirring motor concentrically with the stirring blade; and a means for moving the cup cover vertically.

<0008>

<Operation of the Utility Model> According to the above-described means, the stirring blade enters the cup by operating the vertical movement drive mechanism downward once the cup is positioned directly beneath the stirring blade. The cup cover is disposed concentrically with the stirring blade on the rotating shaft thereof; therefore the cup cover may be easily and accurately positioned relative to the cup to cover the upper surface of the cup by lowering the cup cover in conjunction with lowering the stirring blade via the vertical movement means. This enables the stirring blade to rotate without spilling any beverage, to ensure the complete mixing.

<0009>

<Embodiment> FIG. 1 and FIG. 2 show configurations of the ingredient stirring device according to an embodiment in a standby mode and during an ingredient stirring process, respectively. The ingredient stirring device is basically configured from a stirring blade 1, a stirring motor 2 which drives the stirring blade 1, a base 3 which guides and supports the stirring blade 1 and the stirring motor 2, allowing the same to move in a vertical direction, a vertical movement drive mechanism 4 which is mounted on the base 3 and moves the stirring motor 2 vertically, and a cup cover 5.

<0010>

Here, the afore-mentioned stirring blade 1 is connected to the lower end of a rotating shaft 21 attached to the stirring motor 2. The stirring motor 2 has an L-shaped motor support frame 22 mounted thereto and the tip thereof engages with a vertical slide shaft 31 mounted to the base 3 so that the slide shaft 31 guides and supports vertical movement of the stirring motor 2. Further, the motor support frame 22 is connected to a conveyer in the vertical movement drive mechanism 4 described below. The numeral 23 represents a slide bearing for the motor support frame 22.

<0011>

The cup cover 5 is a cap that covers an opening of a cup containing ingredients during the ingredient preparing processes described below. The cup cover 5 is loosely fitted onto the rotating shaft 21 of the stirring motor 2, and disposed concentrically with the stirring blade 1. The upper surface of the cover has an inlet for a diluent dispensing nozzle 51, connected via a hose to a hot water tank or similar diluent supply device (not shown). Further, the bottom peripheral surface of the cup cover has a protruding guide member 52 that fits the upper surface of the cup when the cover lands on the cup, to position the cup and the cup cover for a stirring operation. The cup cover 5 is mounted with a reverse-L-shaped cover support frame 53. The cover support frame 53 is supported by and positioned on the motor support frame with one end of the cover support frame fitting the aforementioned slide shaft 31. The numeral 54 represents a slide bearing for the cover support frame 53.

<0012>

The vertical movement drive mechanism 4 is configured from a conveyer 43 composed of a belt, wire or the like stretched parallel to the slide shaft 31 between upper and lower pulleys 41 and 42; a drive motor 44 connected to the pulley 41; and position detecting switches 45 and 46 which detect the vertical position of the motor support frame 22. Alternatively, the vertical movement drive mechanism 4 may be constituted from a feed screw mechanism employing ball screws instead of the aforementioned conveyer.

<0013>

When discharged, a cup indicated by a numeral 6 contains ingredients 7 such as powder or the like therein; the cup 6 is held and carried through the machine by a cup conveyance mechanism indicated by a numeral 8.

An ingredient stirring operation according to the above-described configuration is described next. In a standby mode, the ingredient stirring device is in the state illustrated in FIG. 1. Namely, in the standby state, the vertical movement drive mechanism 4 rests at a raised position. The motor support frame 22, as well as the stirring motor 2 and the cup cover 5 on the cover support frame 53, are also kept raised in the standby state.

<0014>

Here, a vending command initiates a series of serving operations; when the cup 6 containing the ingredients 7 arrives directly beneath the stirring blade 1 in the ingredient stirring position, carried thereto by the cup conveyance mechanism 8, an operation control unit (not shown) issues a command whereby the vertical movement drive mechanism 4 first operates downward to lower the motor support frame 22. This lowers the stirring motor 2 together with the stirring blade 1, which enters the cup 6 stationed directly thereunder from above. A detection signal from the position detecting switch 46 in the vertical movement drive mechanism 4 is used to determine the stop position during descent of the stirring blade. When the stirring motor 2 descends, the cup cover 5 follows along with the cover support frame 53. Further, when the cup cover 5 lands on the upper surface of the cup 6, as shown in FIG. 2, the cup cover 5 is separated from the motor support frame 22, stops moving and covers the top surface of the cup 6. This enables correct landing of the cup cover upon the top surface of the cup 6 regardless of the height of the cup 6. Moreover, the cup is automatically aligned correctly relative to the cup cover when the cup cover lands on the cup because the cup cover 5 is disposed concentrically with the stirring blade 1. Additionally, the guide member 52 constructed on the cover easily fits the top opening of the cup 6 in advance and provides the exact positioning by aligning the cup 6 with the center of the stirring blade 1. The guide member 52 may be constructed to fit the outer edges of the cup 6. This cup positioning maneuver prevents the cup from coming into contact with the stirring blade 1.

<0015>

Once this state is achieved, a given amount of hot or cold diluent is subsequently dispensed into the cup 6 through the nozzle 51 in the cover 5, followed by startup of the stirring motor 2. The stirring motor 2 rotates the stirring blade 1, thereby stirring and mixing the ingredients and the diluent inside the cup 6 to prepare the beverage. Here, once a given stirring time elapses, the stirring motor 2 stops, the vertical movement drive mechanism 4 ascends along with the motor support frame 22 which raises the stirring motor 2 and the stirring blade 1 out of the cup 6. During this raising process, the motor support frame 22 also raises the cover support frame 53 and the cup cover 5. Once the motor support frame 22 reaches the standby position, the position detecting switch 45 activates to stop the vertical movement drive mechanism 4. A series of these ingredient stirring operations programmed into the operation control unit. Once the aforementioned ingredient stirring process is complete, the cup conveyance mechanism 8 starts to move again to deliver the cup containing the beverage to the product take-out window.

<0016>

In the ingredient stirring process described above, the vertical movement drive mechanism 4 may be operated so that the stirring blade 1 reciprocate vertically inside the cup 6 to the extent of not pushing up the cup cover 5; this provides more effective stirring of the ingredients. Moreover, a small amount of hot

water may be dispensed into the cup cover 5 through the nozzle 51 while rotating the stirring blade immediately before the completion of ingredient stirring, to rinse the stirring blade 1 and the inner surface of the cup cover 5 as the stirring blade 1 is being pulled up from the cup.

<0017>

<**The Effectiveness of the Utility Model**> According to the present utility model described above, an ingredient stirring device comprises a stirring blade connected to one end of a rotating shaft of a stirring motor; a base that guides and supports the stirring motor, allowing the stirring motor to move vertically; a vertical movement drive mechanism mounted on the base for moving the stirring motor; a cup cover disposed on the rotating shaft of the stirring motor concentrically with the stirring blade; and a means for moving the cup cover vertically. This construction uses a simple configuration to facilitate aligning and attaching a cover to a cup, and thus provides a cost benefit. Additionally, since the beverage does not spill, ingredients can be stirred more vigorously, and even the beverages with harder-to-dissolve ingredients can be prepared well.

言葉

Certification

I, Harumi K. Rudolph, hereby certify the following:

I am fluent in the English and Japanese languages. I have translated and/or reviewed the translation of the Japanese document identified as:

JP H04-136787 U

and find it to be a true and accurate translation to the best of my knowledge and ability.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Signature

Harumi K. Rudolph

Harumi K. Rudolph
d.b.a. Kotoba Translations

Date

Jan. 22, 2017

EXHIBIT B

Japan

Utility Model Act (Act No. 123 of April 13, 1959, as last amended in 2006)

Machine translation

- [Utility Model Act](#)
 - [Chapter I General Provisions](#)
 - [Chapter II Utility Model Registration and Applications for a Utility Model Registration](#)
 - [Chapter III Utility Model Technical Opinion](#)
 - [Chapter IV Utility Model Rights](#)
 - [Section 1 Utility Model Rights](#)
 - [Section 2 Infringement of rights](#)
 - [Section 3 Registration Fees](#)
 - [Chapter V Trial](#)
 - [Chapter VI Retrial and Litigation](#)
 - [Chapter VII Special Provisions Concerning International Applications under the Patent Cooperation Treaty](#)
 - [Chapter VIII Miscellaneous Provisions](#)
 - [Chapter IX Penal Provisions](#)

Utility Model Act

(Act No. 123 of April 13, 1959)

Chapter I General Provisions

(Purpose)

Article 1 The purpose of this Act is to encourage devices by promoting the protection and the utilization of devices relating to the shape or structure of an article or combination of articles, and thereby to contribute to the development of industry.

(Definitions)

Article 2 (1) "Device" in this Act means the creation of technical ideas utilizing the laws of nature.

(2) "Registered utility model" in this Act means a device for which a utility model registration has been granted.

(3) "Working" of a device in this Act means making, using, assigning, leasing, exporting, importing or offering for assignment or lease (including displaying for the purpose of assignment or lease, the same shall apply hereinafter) an article which embodies the device.

(Amendment procedures)

Article 2-2 (1) A person undertaking procedures relating to a utility model registration (hereinafter simply referred to as "procedures") including filing an application for a utility model registration and a request before the Patent Office may make amendments only while the case is pending; provided, however, that the person may not amend the description, scope of claims, drawing(s) or the abstract attached to the application, after the expiration of the time limit prescribed by the Cabinet Order from the filing date of the application for a utility model registration.

- (ii) correction of errors; and
 - (iii) clarification of an ambiguous statement.
- (3) Any correction under paragraph (1) shall be made within the scope of the matters described in the description, scope of claims or drawings attached to the application (in the case of correction for the purpose of item (ii) of the preceding paragraph, the description, scope of claims or drawings originally attached to the application).
- (4) The correction under paragraph (1) shall not substantially enlarge or alter the scope of claims.
- (5) Article 4 of the Patent Act shall apply mutatis mutandis to the period prescribed in paragraph (1)(i).
- (6) Notwithstanding item (i) of paragraph (1), where, due to reasons beyond the control of the person who requests a correction under paragraph (1), the person is unable to request the correction within the time limit as provided in the said item, the person may request the correction within 14 days (where overseas resident, within two months) from the date on which the reasons ceased to exist, but not later than six months following the expiration of the said time limit.
- (7) In addition to the corrections allowed under paragraph (1), a holder of utility model right may correct the description, scope of claims, or drawings attached to the application as far as such correction is for the purpose of deletion of a claim or claims; provided, however, that where a trial for invalidation of the utility model registration is pending at the Patent Office, the description, scope of claims, or drawings attached to the application may not be corrected after notice is given under Article 156(1) of the Patent Act applied mutatis mutandis pursuant to Article 41 (in the case where the proceedings have been reopened under Article 156(2) of the Patent Act, after further notice is given under Article 156(1) of the Patent Act).
- (8) A correction under paragraph (1) or the preceding paragraph may be made even after the lapse of the utility model right; provided, however, that this shall not apply after the utility model registration has been invalidated in a trial for invalidation of the utility model registration.
- (9) For any correction under paragraph (1) or paragraph (7), a statement of correction shall be submitted in writing.
- (10) For any correction under paragraph (1), the corrected description, scope of claims or drawings shall be attached to the statement of correction.
- (11) Where a correction has been made under paragraph (1) or paragraph (7), the filing of the application for the utility model registration and the registration of the establishment of the utility model right shall be deemed to have been made based on the corrected description, scope of claims or drawings.
- (12) Where a correction has been made under paragraph (1) or paragraph (7), the matters stated in the corrected description and scope of claims and the contents of the corrected drawings shall be published in the utility model bulletin in the case of correction under paragraph (1), and the fact thereof shall be published in the utility model bulletin in the case of correction under paragraph (7).
- (13) Articles 127 and 132(3) of the Patent Act shall apply mutatis mutandis to the case of paragraph (1) and (7).

(Order to amend relating to correction)

Article 14-3 Where matters stated in the corrected description, scope of claims or drawings attached to a statement of correction (limited to correction under paragraph (1) of the preceding Article) fall under any of the following, the Commissioner of the Patent Office may order the amendment of the corrected description, scope of claims or drawings attached to the statement of correction, designating an adequate time limit:

- (i) where the device identified by the matters stated in the corrected scope of claims attached to the statement of correction is not pertaining to the shape or structure of an article or combination of articles;

(ii) where the device identified by the matters stated in the corrected scope of claims attached to the statement of correction is not registrable under Article 4;

(iii) where the matters stated in the corrected description, scope of claims or drawings attached to the statement of correction do not satisfy the requirement prescribed in Article 5(6)(iv) or Article 6; or

(iv) where the corrected description, scope of claims or drawings attached to the statement of correction does not state all the necessary matters or is extremely unclear.

(Duration of utility model rights)

Article 15 The duration of a utility model right shall expire after a period of ten years from the filing date of the application for utility model registration.

(Effect of utility model right)

Article 16 A holder of utility model right shall have the exclusive right to work the registered utility model as a business; provided, however, that where an exclusive license regarding the utility model right is granted to a licensee, this shall not apply to the extent that the exclusive licensee is licensed to exclusively work the registered utility model.

(Relationship with registered utility model, etc. held by others)

Article 17 Where a registered utility model uses another person's registered utility model, patented invention, or registered design or design similar thereto for which an application was filed prior to the date of filing of the application for the utility model registration, or where the utility model right is in conflict with another person's design right or trademark right obtained based on an application filed prior to the date of filing of the application for the utility model registration, the holder of utility model right, exclusive licensee or non-exclusive licensees may not work the registered utility model as a business.

(Exclusive license)

Article 18 (1) A holder of utility model right may grant an exclusive license to the utility model right.

(2) An exclusive licensee shall have an exclusive right to work the registered utility model as a business to the extent permitted by the contract granting the license.

(3) Articles 77(3) to (5) (transfer, etc.), 97(2) (waiver), 98(1)(ii) and (2) (effect of registration) of the Patent Act shall apply mutatis mutandis to exclusive licenses.

(Non-exclusive license)

Article 19 (1) A holder of utility model right may grant a non-exclusive license on the utility model to any third party.

(2) A non-exclusive licensee shall have a right to work the registered utility model as a business to the extent prescribed by this Act or permitted by the contract granting the license.

(3) Articles 73(1) (joint ownership), 97(3) (waiver), 99 (effect of registration) of the Patent Act shall apply mutatis mutandis to non-exclusive licenses.

(Non-exclusive license due to the working of the registered utility model prior to the registration of the request for a trial for patent invalidation)

Article 20 (1) A person falling under any of the following items, who is doing a business working an invention in Japan or preparing such business, before the registration of a request for a trial for patent invalidation under Article 123(1) of the Patent Act (simply referred to in this paragraph as the "Trial for Patent Invalidation"), without knowledge that

EXHIBIT C

901.05 Foreign Patent Documents [R-08.2017]

All foreign patents, published applications, and any other published derivative material containing portions or summaries of the contents of published or unpublished patents (e.g., abstracts) which have been disseminated to the public are available to U.S. examiners. See [MPEP §§ 901.06\(a\) \(s901.html#d0e113260\)](#), paragraphs I.C. and IV.C and [901.08 \(s901.html#ch900_d225b7_257b9_66\)](#). In general, a foreign patent, the contents of its application, or segments of its content should not be cited as a reference until its date of patenting or its public availability date (e.g., publication date) can be confirmed by an examiner's review of a copy of the document. Examiners should remember that in some countries, there is a delay between the date of the patent grant and the date of publication.

Information pertaining to those countries from which the most patent publications are received is given in the following sections and in [MPEP § 901.05\(a\) \(s901.html#d0e112030\)](#). Additional information can be obtained from the Scientific and Technical Information Center (STIC).

See [MPEP § 707.05\(e\) \(s707.html#d0e73852\)](#) for data used in citing foreign references.

I.OVERVIEW OF FOREIGN PATENT LAWS

This section includes some general information on foreign patent laws and summarizes particular features and their terminology. Some additional details on the most commonly cited foreign patent publications may be found under the individual country in paragraph V., below. Examiners should recall that, in contrast to the practice in many other countries, under U.S. patent law a number of different events all occur on the issue date of a U.S. patent. These events include the following:

- (A) a patent document, the "letters patent" which grants and thereby creates the legal rights conferred by a patent, is executed and sent to the applicant;
- (B) the patent rights come into existence;
- (C) the patent rights can be exercised;
- (D) the specification of the patent becomes available to the public;
- (E) the patented file becomes available to the public;
- (F) the specification is published in printed form; and
- (G) an issue of an official journal, the *Official Gazette*, containing an announcement of the patent and a claim, is published.

In most foreign countries, various ones of these events occur on different days and some of them may never occur at all.

The following list catalogs some of the most significant foreign variations from U.S. practices:

A.Applicant

In most countries, the owner of the prospective rights, derived from the inventor, may also apply for a patent in the owner's name as applicant; in a few, other persons may apply as well or be joined as coapplicants. Hence, applicant is not synonymous with inventor, and the applicant may be a company. Some countries require the inventors' names to be given and regularly print them on the published copies. Other countries may sometimes print the inventors' names only when available or when requested to do so.

B.Application

The word "application" is commonly used in the U.S. to refer to the entire set of papers filed when seeking a patent. However, in many countries and in PCT cases, the word application refers only to the paper, usually a printed form, which is to be "accompanied by" or have "attached" to it certain other papers, namely a specification, drawings when necessary, claims, and perhaps other papers. Unless it is otherwise noted in the following portions of this section, the term "application" refers to the entire set of papers filed.

C.Publication of Contents of Pending Applications

In general, pending applications are confidential until a certain stage in the proceedings (e.g., upon patent grant), or until a certain date (e.g., 18 months after filing), as may be specified in a particular law.

Many countries have adopted the practice of publishing the specification, drawing, or claims of pending applications. In these countries, the publication of the contents of the application occurs at a certain time, usually 18 months after filing. The applicant is given certain provisional rights upon publication even though examination has not been completed or in some cases has not even begun at the time of publication.

This publication may take either of two forms. In the first form, some countries publish a notice giving certain particulars in their official journal, and thereafter, any one may see the papers at the patent office or order copies. This procedure is referred to as "laying open for public inspection." There is no printed publication of the specification, although an abstract may be published in printed form. If anyone can inspect or obtain copies of the laid open application, then it is sufficiently accessible to the public to constitute a "publication" within the meaning of [pre-AIA 35 U.S.C. 102\(a\) \(mpep-9015-appx-I.html#d0e302391\)](#) and [102\(b\) \(mpep-9015-appx-I.html#d0e302383\)](#) and [35 U.S.C. 102\(a\)\(1\) \(mpep-9015-appx-I.html#d1d85b_11e72_307\)](#). The full application is thus available as prior art as of either the date of publication of its notice or its laying open to public inspection if this is a later date. See *In re Wyer*, 655 F.2d 221, 210 USPQ 790 (CCPA 1981). See [MPEP § 2127 \(s2127.html#d0e202374\)](#), paragraph III.

In the second form, several other countries publish the specifications of pending applications in printed form at a specified time, usually 18 months after filing. These documents, of course, constitute references as printed publications.

D.Administrative Systems

Patent law administration varies from country to country. In some countries, all that is undertaken is an inspection of the papers to determine if they are in proper form. Other countries perform an examination of the merits on the basis of an extensive search of the prior art, as is done in the U.S. The former are referred to as nonexamining or registration countries, although some systems allow for a rejection on matters apparent on the face of the papers, such as matters of form or statutory subject matter.

Of the examining countries, the extent of the material searched prior to issue varies greatly. Only a few countries include both their own patents and a substantial amount of foreign patent material and nonpatent publications in their search files. Some countries specifically limit the search by rule, or lack of facilities, to their own patents with very little or no additional material. An increasing number of countries are requiring applicants to give information concerning references cited in corresponding applications filed in other countries.

E.Opposition

Some examining countries consider participation by the public an inherent feature of their examining system. When an application is found to be allowable by the examiner, it is "published" for opposition. Then there is a period, usually 3 or 4 months, within which members of the public can oppose the grant of the patent. In some countries, the opposing party can be any person or company. In other countries, only those parties who are affected by the outcome can participate in the opposition. The opposition is an *inter partes* proceeding and the opposing party can ordinarily raise any ground on the basis of which a patent would be refused or held invalid, including any applicable references.

The publication for opposition may take the form of a laying open of the application by the publication of a notice in the official journal with the application being then open to public inspection and the obtaining of copies. Otherwise, publication occurs by the issue of the applications in printed form. Either way, these published documents constitute printed publications which are available as references under pre-AIA [35 U.S.C. 102\(a\) \(mpep-9015-appx-I.html#d0e302391\)](#) and [102\(b\) \(mpep-9015-appx-I.html#d0e302383\)](#) and [35 U.S.C. 102\(a\)\(1\) \(mpep-9015-appx-I.html#al_d1d85b_11e72_307\)](#).

F.The Patent

Practices and terminology vary worldwide regarding patents. In some countries, there is no "letters patent" document which creates and grants the rights. In other countries, the examiner grants the patent by signing the required paper. In a few countries, the patent is granted by operation of law after certain events have occurred. The term "granting the patent" is used here for convenience, but it should be noted that [35 U.S.C. 102\(a\) \(mpep-9015-appx-I.html#d0e302383\)](#) and [102\(b\) \(mpep-9015-appx-I.html#d0e302383\)](#) or [35 U.S.C. 102\(a\)\(1\) \(mpep-9015-appx-I.html#al_d1d85b_11e72_307\)](#) do not use this terminology.

A list of granted patents is ordinarily published in each country's official journal and some of these countries also print an abstract or claims at or after the granting date. Not all countries publish the granted patent. Where the specifications of granted patents are issued in printed form, publication seldom occurs simultaneously with the day of grant; instead, publication occurs a short time thereafter. There also are a few countries in which publication does not take place until several years after the grant.

The length of time for which the patent is enforceable (the patent term) varies from country to country. The term of the patent may start as of the grant of the patent, or as of the filing date of the application.

Most countries require the payment of periodic fees to maintain a patent in force. These fees often start a few years after filing and increase progressively during the term of the patent. If these fees are not paid within the time allowed, the patent lapses and is no longer in force. This lapsing does not affect the use of the patent as a reference.

G.Patents of Addition

Some countries issue patents of addition, which should be identified as such, and when separately numbered as in France, the number of the addition patent should be cited. "Patents of addition" generally cover improvements of a patented parent invention and can be obtained by the owner of the parent invention. Inventiveness in relation to the parent invention need not be demonstrated and the term is governed by the term of the parent patent.

II.CORRESPONDING SPECIFICATIONS IN A FAMILY OF PATENTS

Since a separate patent must be obtained in each country in which patent rights are desired (except for EP, the European Patent Convention, AP, the African Regional Industrial Property Organization, OA, African Intellectual Property Organization, GC, Patent Office of the Cooperation Council for the Arab States of the Gulf, and EA, Eurasian Patent Office, whose members issue a common patent), there may be a large number of patents issued in different countries for the same invention. This group of patents is referred to as a family of patents.

All of the countries listed in paragraph V, below are parties to the Paris Convention for the Protection of Industrial Property and provide for the right of priority. If an application is filed in one of these countries, an application for the same invention thereafter filed in another country, within 1 year of the filing of the first application, will be entitled to the benefit of the filing date of the first application on fulfilling various conditions. See [MPEP § 213 \(s213.html#ch200_d1ff72_162b8_108\)](#). The patents or published specifications of the countries of later filing are required to specify that priority has been claimed and to give the country, date, and number of the priority application. This data serves the purpose, among others, of enabling any patent based on the priority application to be easily located.

In general, the specification of the second application is identical in substance to the specification of the first. In many instances, the second, if in another language, is simply a translation of the first with perhaps some variation in purely formal parts. But in a minority of cases, the two may not be identical. For instance, sometimes two applications filed in one country are combined into one second application which is filed in another country. Alternatively, a second application could be filed for only part of the disclosure of the priority application. The second application may have the relationship to the first which we refer to as a continuation-in-part (e.g., the second application includes additional subject matter discovered after the first was filed). In some instances, the second application could have its disclosure diminished or increased, to meet the requirements or practices of the second country.

Duplicate or substantially duplicate versions of a foreign language specification, in English or some other language known to the examiner, can sometimes be found. It is possible to cite a foreign language specification as a reference, while at the same time citing an English language version of the specification with a later date as a convenient translation if the latter is in fact a translation. Questions as to content in such cases must be settled based on the specification which was used as the reference.

If a U.S. patent or U.S. published application being considered as a reference in an application subject to [pre-AIA 35 U.S.C. 102 \(mpep-9015-appx-I.html#d0e302383\)](#) claims the priority of a previously filed foreign application, it may be desirable to determine if the foreign application has issued or has been published, to see if there is an earlier date. For example, it has occurred that an examiner rejected claims on the basis of a U.S. patent and the applicant filed affidavits to overcome the filing date of the reference; the affidavits were controversial and the case went to appeal, with an extensive brief and an examiner's answer having been filed. After all this work, somebody noticed that the U.S. patent reference claimed the priority of a foreign application filed in a country in which patents were issued fairly soon, checked the foreign application, and discovered that the foreign patent had not only been issued, but also published in printed form, more than 1 year prior to the filing date of the application on appeal. If a U.S. patent or U.S. published application is being considered as a reference in an application subject to [35 U.S.C. 102 \(mpep-9015-appx-I.html#al_d1fbef_234ed_52\)](#), whether the filing date of the foreign priority application claimed in the reference can be used as the "effectively filed date" under [35 U.S.C. 102\(a\)\(2\) \(mpep-9015-appx-I.html#al_d1d85b_11e72_315\)](#) is determined by [35 U.S.C. 102\(d\) \(mpep-9015-appx-I.html#al_d1d85b_11ecb_1d1\)](#). See [MPEP § 2154.01\(b\) \(s2154.html#ch2100_d20034_12188_300\)](#).

If a foreign patent or specification claims the priority of a U.S. application, it can be determined whether the latter is abandoned, still pending, or patented. Even if the U.S. case is or becomes patented, however, the foreign documents may still be useful as supplying an earlier printed publication date.

If a foreign patent or specification claims the priority of an application in another foreign country, it may sometimes be desirable to check the latter to determine if the subject matter was patented or published at an earlier date. As an example, if a British specification being considered as a reference claims the priority of an application filed in Belgium, it is known at once that a considerably earlier effective date can be established, if needed, because Belgian patents issue soon after filing. In addition, if the application referred to was filed in one of the countries which publish applications in printed form 18 months after filing, the subject matter of the application will be available as a printed publication as of the 18 month publishing date.

The determination of whether a foreign patent has been issued or the application published is a comparatively simple matter for some countries, but for some it is quite laborious and time-consuming. Sources for this data which are not maintained by the Office do exist and can be utilized for locating corresponding patents. Two possible sources are the Derwent World Patents Index (DWPI) produced by Thomson Reuters, and the International Patent Documentation Center (INPADOC), which is produced by the European Patent Office. Additionally, Chemical Abstracts Service (CAS) publishes abstracts of patents in the chemical arts from a large number of countries. Only one patent or published specification from a family is abstracted in full and any related family members issued or published are cross-referenced. Chemical Abstracts are available online via commercial databases or via Microfilm/CD-ROM in the Main Scientific and Technical Information Center (STIC). To get access to Chemical Abstracts online, examiners should contact their SPE for approval and email the STIC-ERC mailbox. The microfilm collection is available from 1907-1987; and the CD-ROM collection is available from 1987-2011. The coverage is for approximately 83 journals, with the oldest content dating from 1859. Examiners may also utilize the Global Dossier Public Access which provides online access to the file histories of related applications from participating IP Offices. This includes all international applications filed under the Patent Cooperation Treaty (PCT) as well as patent applications from World Intellectual Property Organization-Centralized Access to Search and Examination (WIPO-CASE) participating offices. See [MPEP § 901.08 \(s901.html#ch900_d225b7_257b9_66\)](http://www.wipo.int/case/en/) for additional information. See also www.wipo.int/case/en/ (<http://www.wipo.int/case/en/>) for additional information regarding WIPO-CASE.

When an application is filed outside the Paris Convention year from an earlier application, the later application may not refer to the first application. It is hence possible that there will be duplicate specifications published without any indication revealing the fact. These may be detected when the two copies come together in the same subclass. Because the later application is filed outside the convention year, the earlier application may be prior art to the latter if it has been published or issued.

III.VALIDITY OF DATES DISPLAYED ON FACE OF FOREIGN PATENT DOCUMENTS

The examiner is not required to prove either the date or the occurrence of events specified on specifications of patents or applications, or in official journals, of foreign patent offices which the Office has in its possession. In a court action, certified copies of the Office copies of these documents constitute *prima facie* evidence in view of 28 U.S.C. 1745. An applicant is entitled to show the contrary by competent evidence, but this question seldom arises.

The date of receipt of copies by the Office, as shown by Office records or stamped on the copies, need only to be stated by the examiner, when necessary.

IV.NOTES ON INDIVIDUAL COUNTRIES

The following table gives some data concerning the published patent material of a number of countries to assist in their use and citation as references. This table reflects only the most current patent office practice for each foreign country specified and is not applicable for many older foreign patent documents. The STIC staff can help examiners obtain data related to any documents not covered by this table. The citation dates listed in the following table are not necessarily the oldest possible dates. Sometimes an earlier effective date, which is not readily apparent from the face of the document, is available. If an earlier date is important to a rejection, the examiner should consult STIC staff, who will attempt to obtain further information regarding the earliest possible effective date.

How To Use Table

Each horizontal row of boxes contains information on one or more distinct patent documents from a specified country available as a reference under [\(pre-AIA 35 U.S.C. 102\(a\) \(mpep-9015-appx-l.html#d0e302391\)\)](http://www.uspto.gov/web/offices/pac/mpep/s901.html#AIA_35_U.S.C._102(a)) and [\(102\(b\) \(mpep-9015-appx-l.html#d0e302383\)\)](http://www.uspto.gov/web/offices/pac/mpep/s901.html#AIA_35_U.S.C._102(b)) or [\(35 U.S.C. 102\(a\)\(1\) \(mpep-9015-appx-l.html#al_d1d85b_11e72_307\)\)](http://www.uspto.gov/web/offices/pac/mpep/s901.html#AIA_35_U.S.C._102(a)(1)). If several distinct patent documents are included within a common box of a row, these documents are related to each other and are merely separate documents published at different stages of the same invention's patenting process. Usually, this related group of documents includes a published application which ripens into an issued patent. Within each box of the second column of each row, the top listed document of a related group is the one that is "published" first (e.g., made available for public inspection by laying open application, or application printed and disseminated to the public). Once an examiner determines the country or organization publishing the documents, the name of the document can be located in the second column of the table and the examiner can determine if a document from the related group containing the same or similar disclosure having an earlier date is available as a reference. Usually, the documents within a related group have identical disclosures; sometimes, however, there are differences in the claims or minor differences in the specification. Therefore, examiners should always verify that the earlier related document also includes the subject matter necessary for the rejection. Some countries issue more than one type of patent and for clarity, in these situations, separate rows are provided for each type.

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
EP			
European Patent Office	European patent application	Date application made available to public	Printing of application occurs 18 months after priority date.
	European patent specification	Date published	EP dates are in day/month/year order.

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
	New European patent specification (above specification amended)	Date published	
FR			
France	Demande de brevet d'invention (patent application)	Disposition du public de la demande (date of laying open application)/date published	Date of laying open the application is the earliest possible date. This usually occurs 18 months after the filing or priority date but can occur earlier at applicant's request. The application is printed a short time after being laid open.
	Brevet d'invention (patent)	Disposition du public du brevet d'invention (date of publication of the notice of patent grant)	
			FR dates are in day/month/year order
FR			
France	Demande de certificat d'utilite (utility certificate application 1st level publication)	Disposition du public de la demande (date published)	
	Certificat d'utilite (utility certificate, 2nd publication)	Disposition du public du certificat d'utilite (date published)	
DE Germany	Offenlegungsschrift (unexamined patent application)	Offenlegungstag (date application printed)	Patentschrift are printed (up to four different times) after examination and at various stages of opposition.
	Patentschrift (examined patent)	Veröffentlichungstag der patenterteilung (date printed)	DE dates are in day/month/year order
DE			
Germany	Patentschrift (Ausschließungspatent) (exclusive type patent based on former East German application and published in accordance with E. German laws)	First printing coded "DD" (date of first publication before examination as to novelty)	Several more printings (up to four) occur as examination proceeds and patent is granted. Separate DD numbering series is used.
DE			
Germany	Patentschrift (Wirtschaft-patent) (economic type patent published in accordance with East German laws)	First printing coded "DD" (date of first printing before examination as to novelty)	Another printing occurs after examination. Separate DD numbering series is used.
DE			
Germany	Gebrauchsmuster (utility model or petty patent)	Eintragungstag (date laid open after registration as a patent)	Copy is supplied only on request.
		Bekanntmachung im patentblatt (date published for public)	Published from No. DE-GM 1 186 500J.
JP Japan	Kôkai Tokkyo kôhō (unexamined patent application) Kôhyo Tokkyo kôhō (unexamined patent application based on international application)	Upper right corner beneath number (date laid open and printed)	INID codes (41)-(47) include first date listed in terms of the year of the Emperor. To convert yrs. prior 1989, add 1925. To convert yrs. after 1988, add 1988.

ISSUING/ PUBLISHING COUNTRY OR ORGANIZATION	DOCUMENT NAME IN LANGUAGE OF ISSUING COUNTRY (TYPE OF DOCUMENT)	FOREIGN LANGUAGE NAME DESIGNATING THE DATE USED FOR CITATION PURPOSES (TYPE OF DATE)	GENERAL COMMENTS
	Tokkyo kôhô (examined patent application)	Upper right corner beneath number (date laid open and printed; 1st publication when Kôkai Tokkyo kôhô or Kôhyo Tokkyo kôhô not published)	Newer documents also include second date following the first given in OUR Gregorian Calendar in year/month/day sequence in Arabic numerals intermixed with their equivalent JP characters.
JP Japan	Tokkyo shinpan seikyû kôkoku (corrected patent specification)	Upper right corner beneath number (date laid open and printed)	
JP Japan	Kôkai jitsuyô shin-an kôhô (unexamined utility model application) or Kôhyo jitsuyô shin-an kôhô (unexamined utility model application based on international)	Upper right corner beneath number (date laid open and printed)	
	Jitsuyô shin-an kôhô (examined utility model application)	Upper right corner beneath number (date laid open and printed; 1st publication when Kôkai or Kôhyo not published)	
JP Japan	Tôroku jitsuyô shin-an shinpan seikyû kôkoku (corrected registered utility model)		
JP Japan	Isyô kôhô (registered design application)		
RU Russian Federation	Zayavka Na Izobretenie (unexamined application for invention) Patent Na Izobreteniy (Patent)	Date application printed (1st publication) Date printed (normally 2nd publication, but 1st publication when application not published)	
RU Russian Federation	Svidetelstvo Na Poleznuyu Model (utility model)		Supplied upon request only
RU Russian Federation	Patent Na Promishlenniy Obrazec (design patent)		Supplied upon request only
GB United Kingdom	Published patent application (searched, but unexamined) Patent Specification (granted examined patent)	(date of printing the application) (date of printing)	
GB			
United Kingdom	Amended or Corrected Patent Specification (amended granted patent)	(date of printing)	
WO			
World Intellectual Property Organization	International application (PCT patent application)	(date of printing the application)	

901.05(a) Citation Data [R-07.2015]

Foreign patent publications that use Arabic and Roman numerals in lieu of names to indicate the date show in order the day, month, and year, or alternatively, the year, month, and day. Roman numerals always refer to the month.

Japanese patent application publications show the date in Arabic numerals by indicating in order the year of the reign of the Emperor, the month, and the day. To convert the Japanese year of the Emperor to the Western calendar year, for years prior to 1989, add 1925 to the JAPANESE YEAR. For example: 40.3.6 = March 6, 1965. For years after 1988, add 1988 to the JAPANESE YEAR.

901.05(b) Other Significant Data [R-08.2012]

I. NUMBERS FOR IDENTIFICATION OF BIBLIOGRAPHIC DATA ON THE FIRST PAGE OF PATENT AND LIKE DOCUMENTS INCLUDING INDUSTRIAL DESIGNS (INID NUMBERS)

The purpose of INID Codes ("INID" is an acronym for "Internationally agreed Numbers for the Identification of (bibliographic) Data") is to provide a means whereby the various data appearing on the first page of patent and like documents or in patent gazettes can be identified without knowledge of the language used and the laws applied. They are now used by most patent offices and have been applied to U.S. patents since August 4, 1970. Some of the codes are not pertinent to the documents of a particular country and some which are pertinent may, in fact, not be used. INID codes for industrial designs are similar to, but not identical to, those used for patents and like documents. INID codes for industrial designs are provided separately below.

INID Codes and Minimum Required for the Identification of Bibliographic Data for Patent and Like Documents (based on WIPO Standard ST.9)

(10) Identification of the patent, SPC or patent document

°(11) Number of the patent, SPC or patent document

°(12) Plain language designation of the kind of document

°(13) Kind of document code according to WIPO Standard ST.16

°(15) Patent correction information

°°(19) WIPO Standard ST.3 code, or other identification, of the office or organization publishing the document

Notes:

(i) For an SPC, data regarding the basic patent should be coded by using code (68).

(ii) °° Minimum data element for patent documents only.

(iii) With the proviso that when data coded (11) and (13), or (19), (11) and (13), are used together and on a single line, category (10) can be used, if so desired.

(20) Data concerning the application for a patent or SPC

°(21) Number(s) assigned to the application(s), e.g., "Numéro d'enregistrement national," "Aktenzeichen"

°(22) Date(s) of filing the application(s)

°(23) Other date(s), including date of filing complete specification following provisional specification and date of exhibition

(24) Date from which industrial property rights may have effect

(25) Language in which the published application was originally filed

(26) Language in which the application is published

Notes:

(i) Attention is drawn to the Appendix 3 of WIPO Standard ST. 9 which contains information on the term of protection and on the date from which industrial property rights referred to under code (24) may have effect.

(ii) The language under code (25) and (26) should be indicated by using the two-letter language symbol according to International Standard ISO 639:1988.

(30) Data relating to priority under the Paris Convention and other agreement not specifically provided for elsewhere

°(31) Number(s) assigned to priority application(s)

°(32) Date(s) of filing of priority application(s)

°(33) WIPO Standard ST.3 code identifying the national industrial property office allotting the priority application number or the organization allotting the regional priority application number; for international applications filed under the PCT, the code "WO" is to be used

(34) For priority filings under regional or international arrangements, the WIPO Standard ST.3 code identifying at least one country party to the Paris Convention for which the regional or international application was made

Notes:

(i) With the proviso that when data coded (31), (32), and (33) are presented together, category (30) can be used, if so desired. If an ST.3 code identifying a country for which a regional or international application was made is published, it should be identified as such using INID Code (34) and should be presented separately from elements coded (31), (32) and (33) or (30).

(ii) The presentation of priority application numbers should be as recommended in WIPO Standards ST.10/C and in ST.34.

(40) Date(s) of making available to the public

°°(41) Date of making available to the public by viewing, or copying on request, an unexamined patent document, on which no grant has taken place on or before the said date

°(42) Date of making available to the public by viewing, or copying on request, an examined patent document, on which no grant has taken place on or before the said date

°(43) Date of making available to the public by printing or similar process of an unexamined patent document, on which no grant has taken place on or before the said date

°(44) Date of making available to the public by printing or similar process of an examined patent document, on which no grant or only a provisional grant has taken place on or before the said date

°(45) Date of making available to the public by printing or similar process of a patent document on which grant has taken place on or before the said date

(46) Date of making available to the public the claim(s) only of a patent document

°(47) Date of making available to the public by viewing, or copying on request, a patent document on which grant has taken place on or before the said date

°(48) Date of issuance of a corrected patent document

Note:

°Minimum data element for patent documents only, the minimum data requirement being met by indicating the date of making available to the public the patent document concerned.

(50) Technical information

°(51) International Patent Classification or, in the case of a design patent, as referred to in subparagraph 4(c) of WIPO Standard ST.9, International Classification for Industrial Designs

(52) Domestic or national classification

°(54) Title of the invention

(56) List of prior art documents, if separate from descriptive text

(57) Abstract or claim

(58) Field of search

Notes:

(i) The presentation of the classification symbols of the International Classification for Industrial Designs should be made in accordance with paragraph 4 of WIPO Standard ST.10/C.

(ii) With regard to code (56) attention is drawn to WIPO Standard ST.14 in connection with the citation of references on the front page of patent documents and in search reports attached to patent documents.

(60) References to other legally or procedurally related domestic or previously domestic patent documents including unpublished applications therefor

°(61) Number and, if possible, filing date of the earlier application, or number of the earlier publication, or number of earlier granted patent, inventor's certificate, utility model or the like to which the present document is an addition

°(62) Number and, if possible, filing date of the earlier application from which the present patent document has been divided up

°(63) Number and filing date of the earlier application of which the present patent document is a continuation

°(64) Number of the earlier publication which is "reissued"

(65) Number of a previously published patent document concerning the same application

(66) Number and filing date of the earlier application of which the present patent document is a substitute, i.e., a later application filed after the abandonment of an earlier application for the same invention

(67) Number and filing date of a patent application, or number of a granted patent, on which the present utility model application or registration (or a similar industrial property right, such as a utility certificate or utility innovation) is based

(68) For an SPC, number of the basic patent and/or, where appropriate, the publication number of the patent document

Notes:

(i) Priority data should be coded in category (30).

(ii) Code (65) is intended primarily for use by countries in which the national laws require that republication occur at various procedural stages under different publication numbers and these numbers differ from the basic application numbers.

(iii) Category code (60) should be used by countries which were previously part of another entity for identifying bibliographic data elements relating to applications or grants of patents which data had initially been announced by the industrial property office of that entity.

(70) Identification of parties concerned with the patent or SPC

°(71) Name(s) of applicant(s)

(72) Name(s) of inventor(s) if known to be such

°°(73) Name(s) of grantee(s), holder(s), assignee(s) or owner(s)

(74) Name(s) of attorney(s) or agent(s)

°°(75) Name(s) of inventor(s) who is (are) also applicant(s)

°°(76) Names(s) of inventor(s) who is (are) also applicant(s) and grantee(s)

Notes:

(i) °°For patent documents for which grant has taken place on or before the date of making available to the public, and gazette entries relating thereto, the minimum data requirement is met by indicating the grantee, and for other documents by indication of the applicant.

(ii) (75) and (76) are intended primarily for use by countries in which the national laws require that the inventor and applicant be normally the same. In other cases (71) or (72) or (71), (72) and (73) should generally be used.

(80) Identification of data related to International Conventions other than the Paris Convention and to legislation

(90) with respect to SPC's

(81) Designated State(s) according to the PCT

(83) Information concerning the deposit of microorganisms, e.g., under the Budapest Treaty

(84) Designated Contracting States under regional patent conventions

(85) Date of commencement of the national phase pursuant to [PCT Article 23\(I\) \(mpep-9025-appx-t.html#d0e363691\)](#) or [40\(I\) \(mpep-9025-appx-t.html#d0e364373\)](#)

(86) Filing data of the PCT international application, i.e., international filing date, international application number, and, optionally, the language in which the published international application was originally filed

(87) Publication data of the PCT international application, i.e., international publication date, international publication number, and, optionally, the language in which the application is published

(88) Date of deferred publication of the search report

(91) Date on which an international application filed under the PCT no longer has an effect in one or several designated or elected States due to failure to enter the national or regional phase or the date on which it has been determined that it had failed to enter the national or regional phase

(92) For an SPC, number and date of the first national authorization to place the product on the market as a medicinal product

(93) For an SPC, number, date and, where applicable, country of origin, of the first authorization to place the product on the market as a medicinal product within a regional economic community

(94) Calculated date of expiry of the SPC or the duration of the SPC

(95) Name of the product protected by the basic patent and in respect of which the SPC has been applied for or granted

(96) Filing date of the regional application, i.e., application filing date, application number, and, optionally, the language in which the published application was originally filed

(97) Publication data of the regional application (or of the regional patent, if already granted), i.e., publication date, publication number, and, optionally, the language in which the application (or, where applicable, the patent) is published

Notes:

(i) The codes (86), (87), (96), and (97) are intended to be used:

- on national documents when identifying one or more of the relevant filing data or publication data of a PCT international application, or of the regional application (or of the regional patent, if already granted), or
- on regional documents when identifying one or more of the relevant filing data or publication data of the PCT international application or of another regional application (or the regional patent, if already granted).

(ii) All data in code (86), (87), (96), or (97) should be presented together and preferably on a single line. The application number or publication number should comprise the three basic elements as shown in the example in paragraph 17 of WIPO Standard ST.10/B, i.e., the two letter code identifying the republishing office, the document number, and the kind of document code.

(iii) When data to be referenced by INID Codes (86) or (87) refer to two or more regional and/or PCT applications, each set of relevant filing or publication data of each such application should be displayed so as to be clearly distinguishable from other sets of relevant data, e.g., by presenting each set on a single line or by presenting the data of each set grouped together on adjacent lines in a column with a blank line between each set. When data to be referenced by codes (86), (87), (96), or (97) refer to two or more PCT international applications and/or regional applications (or regional patents, if already granted), each set of relevant filing or publication data of each such application (or granted patent) should be displayed so as to be clearly distinguishable from other sets of relevant data, e.g., by presenting each set on a single line or by presenting the data of each set grouped together on adjacent lines in a column with a blank line between each set.

(iv) The languages under codes (86), (87), (96), and (97) should be indicated by using the two-letter language symbols according to International Standard ISO 639:1988.

(v) The country of origin in code (93), if mentioned, should be indicated by using the two letter code according to WIPO Standard ST.3.

(vi) Attention is drawn to the Appendix which contains information on the term of protection and on the date from which SPCs referred to under code (94) may have effect.

II.NUMBERS FOR IDENTIFICATION OF BIBLIOGRAPHIC DATA ON THE FIRST PAGE OF INDUSTRIAL DESIGNS (INID NUMBERS)

INID codes for industrial designs are similar to, but not identical to, those used for patents and like documents. INID codes for industrial designs may be of most interest to design patent examiners.

INID Codes and Minimum Required for the Identification of Bibliographic Data for Industrial Designs (based on WIPO Standard ST.80)

(10) Data concerning the registration/renewal

°(11) Serial number of the registration and/or number of the design document

°°(12) Plain language designation of the kind of published document

°(14) Serial number of the renewal where different from initial registration number

°(15) Date of the registration/Date of the renewal

(17) Expected duration of the registration/renewal

(18) Expected expiration date of the registration/renewal

°°(19) Identification, using the two-letter code according to WIPO Standard ST.3, of the authority publishing or registering the industrial design.

Note:

°°Minimum data element for design documents only

(20) Data concerning the application

°(21) Serial number of the application

°(22) Date of filing of the application

°(23) Name and place of exhibition, and date on which the industrial design was first exhibited there (exhibition priority data)

(24) Date from which the industrial design right has effect

(27) Kind of application or deposit (open/sealed)

(28) Number of industrial designs included in the application

(29) Indication of the form in which the industrial design is filed, e.g., as a reproduction of the industrial design or as a specimen thereof

(30) Data relating to priority under the Paris Convention

°(31) Serial number assigned to the priority application

°(32) Date of filing of the priority application

(33) Two-letter code, according to WIPO Standard ST.3, identifying the authority with which the priority application was made

Notes:

(i) With the proviso that when data coded (31), (32) and (33) are presented together, category code (30) can be used, if so desired.

(ii) For international deposits made under the Hague Agreement, the two-letter code "WO" is to be used.

(40) Date(s) of making information available to the public

(43) Date of publication of the industrial design before examination by printing or similar process, or making it available to the public by any other means

(44) Date of publication of the industrial design after examination, but before registration, by printing or similar process, or making it available to the public by any other means

(45) Date of publication of the registered industrial design by printing or similar process, or making it available to the public by any other means

(46) Date of expiration of deferment

(50) Miscellaneous Information

- °(51) International Classification for Industrial Designs (class and subclass of the Locarno Classification)
- (52) National classification
- (53) Identification of the industrial design(s) comprised in a multiple application or registration which is (are) affected by a particular transaction when not all are so affected
- °(54) Designation of article () or product () covered by the industrial design or title of the industrial design
- °°(55) Reproduction of the industrial design (e.g., drawing, photograph) and explanations relating to the reproduction
- (56) List of prior art document, if separate from descriptive text
- (57) Description of characteristic features of the industrial design including indication of colors
- (58) Date of recording of any kind of amendment in the Register (e.g., change in ownership, change in name or address, renunciation to an international deposit, termination of protection)

Notes:

- (i) Code (52) should be preceded by the two-letter code, according to WIPO Standard ST.3, identifying the country whose national classification is used (the two-letter code should be indicated within parentheses).
- (ii) °°Minimum data element for design documents only.
- (60) References to other legally related application(s) and registration(s)
- (62) Serial number(s) and, if available, filing date(s) of application(s), registration(s) or document(s) related by division
- (66) Serial number(s) of the application, or the registration, of the design(s) which is (are) a variant(s) of the present one

Note:

Category code (60) should be used by countries which were previously part of another entity for identifying bibliographic data elements relating to applications or registrations of industrial designs, which data had initially been announced by the industrial property office of that entity.

- (70) Identification of parties concerned with the application or registration

°°(71) Name(s) and address(es) of the applicant(s)

(72) Name(s) of the creator(s) if known to be such

°°(73) Name(s) and address(es) of the owner(s)

(74) Name(s) and address(es) of the representative(s)

(78) Name(s) and address(es) of the new owner(s) in case of change in ownership

Note:

°°If registration has taken place on or before the date of making the industrial design available to the public, the minimum data requirement is met by indicating the owner(s); in other cases, by indicating the applicant(s).

(80) Identification of certain data related to the international deposit of industrial designs under the Hague Agreement Concerning the International Deposit of Industrial Designs and data related to other international conventions.

Designated State(s)/State(s) concerned:

- (81) Designated State(s) according to the 1960 Act
- (82) State(s) concerned according to the 1934 Act
- (84) Designated Contracting State(s) under regional convention.

Information regarding the owner(s):

- (86) Nationality of the owner(s)
- (87) Residence or headquarters of the owner(s)
- (88) State in which the owner(s) has (have) a real and effective industrial or commercial establishment

Note:

The data to be referenced by INID codes (81) to (88) should be indicated by using the two-letter code according to WIPO Standard ST.3.

901.05(c) Obtaining Copies [R-08.2017]

Until October 1, 1995, the U.S. Patent and Trademark Office (Office) received copies of the published specifications of patents and patent applications from nearly all the countries which issue them in printed form. The Office now receives most foreign patents in the form of CD-ROM and other electronic media. The foreign patents so obtained are available to examiners from the

USPTO's automated search tools such as the Examiner's Automated Search Tool (EAST), the Web-based Examiner's Search Tool (WEST), the Foreign Patent Access System (FPAS), and from the Foreign Patents Service Center in STIC.

Until October 1995, it was the practice in the Office to classify and place only a single patent family member for each invention in the examiner search files. In addition, all non-English language patent documents placed in the examiner files were accompanied, to the extent possible, by an English language abstract. For countries where the specification is printed twice, once during the application stage and again after the patent has been granted, only the first printing was, in general, placed in the search files, since the second printing ordinarily does not vary from the first as to disclosure. The Derwent World Patents index is available on the EAST and WEST systems and provides patent family information and Derwent titles and abstracts in English of foreign patent documents.

Copies of various specifications not included in the search files, whether non-English-language patent documents or documents not printed or available for exchange, may come to the examiner's attention. For example, they may be cited in a motion to dissolve an interference, be cited by applicants, or turn up in an online search. Upon request, STIC will obtain a copy from its extensive collection, or if necessary, from the patent office of the particular country. In the case of unprinted patent documents, STIC will request that the date of granting and the date the specification was made available to the public be indicated on the copies provided by the country of origin. If the examiner wishes to obtain a copy of a specification from an international application filed under the Patent Cooperation Treaty (PCT) or a patent application from a WIPO-CASE participating Office, the Global Dossier Public Access is a tool which provides online access to the file histories of related applications. See [MPEP § 901.08 \(s901.html#ch900_d225b7_257b9_66\)](#) for additional information.

Examiners can request copies of any foreign patent documents by submitting an online request using the Foreign Patent Request Form available through STIC's NPL website on the USPTO intranet. Examiners may also request copies directly from the Foreign Patents Service Center of STIC. If examiners so choose, they can make copies themselves. The most current patent documents are accessible through the USPTO's automated search systems, which allow public and USPTO users to look up, view, and print foreign documents. Older documents can be found on microfilm or print copies in the Main Service Center of the STIC. See [MPEP § 903.03 \(s903.html#d0e114297\)](#). The STIC Foreign Patents Service Center and the Electronic Information Centers (EICs) will assist examiners with accessing patent data from foreign countries. If examiners prefer self-service, EAST, WEST and other foreign patent websites are available for foreign patent retrieval. Additionally, STIC translation staff is able to retrieve foreign patent information for examiners.

901.05(d) Translation [R-08.2017]

Examiners may consult the translators in the Translations Service Center of the Scientific and Technical Information Center (STIC) for oral assistance in translating foreign patents or literature that are possible references for an application being examined. Examiners may also request human (written) translations of pertinent portions of references being considered for citation or already cited in applications. See [MPEP § 901.06\(a\) \(s901.html#d0e113260\)](#), STIC Services - Translations, and [MPEP § 903.03 \(s903.html#d0e114297\)](#), Availability of Foreign Patents.

Examiners may request human (written) translations at any point in the examination process, at the discretion of the individual examiner, but are encouraged to use oral assistance, language reference resources, and machine translations where possible in the early phases of examination. See [MPEP § 706.02 \(s706.html#d0e58220\)](#). Examiners can request human (written) translations, or machine translations, by submitting an online request using the Translations Request Form available through STIC's NPL website on the USPTO intranet. Examiners should check the box for either a human (written) translation or machine translation. The Translations Service Center uses email as the sole delivery method for human (written) translations. The STIC maintains a listing of available machine translations tools on its website <https://usptogov.sharepoint.com/sites/09cdab00/> (<https://usptogov.sharepoint.com/sites/09cdab00/>).

Examiners may also contact in-house translators directly via phone or email. To obtain immediate oral and partial human (written) translations, Examiners may walk-in to the Translations Service Center and meet directly with a Translator.

Equivalent versions of foreign specifications, that is, members of the same patent family, are often available in English or other languages known to the examiner. In addition, copies of previously translated documents are stored in the Translations Service Center. Before any translation request is processed, the staff of the Translations Service Center checks for equivalents or previous translations. The staff of STIC's Foreign Patent and Scientific Literature Service Center or the Translations Service Center can assist examiners in locating equivalents or abstracts. See [MPEP § 901.06\(a\) \(s901.html#d0e113260\)](#), STIC Services - Foreign Patent Services.

901.06 Nonpatent Publications [R-08.2012]

All printed publications may be used as references, the date to be cited being the publication date. See [MPEP § 2128 \(s2128.html#d0e202564\)](#) - [§ 2128.02 \(s2128.html#d0e202804\)](#).

The Scientific and Technical Information Center (STIC) maintains an Electronic Information Center (EIC) or Library in each Technology Center. Copies of non-patent literature can be requested from these facilities. See [MPEP § 707.05\(e\) \(s707.html#d0e73405\)](#) for information on how to cite such publications.

901.06(a) Scientific and Technical Information Center (STIC) [R-07.2015]

The main Scientific and Technical Information Center (STIC) is located at the Remsen Building, Room 1D58, 400 Dulany Street, Alexandria, VA 22314. STIC maintains Electronic Information Centers (EICs) in each Technology Center (TC) whose mission is to assist patent examiners in the patent process by providing fast, accurate, prior art searches, document deliver services, the provision of foreign patent copies, translations of foreign documents, and access to non-patent literature in electronic format and in print.

35 U.S.C. 7 Library.

The Director shall maintain a library of scientific and other works and periodicals, both foreign and domestic, in the Patent and Trademark Office to aid the officers in the discharge of their duties.

Technical literature, foreign patent documents, and reference and online search services available in STIC are all important resources for the patent examiner to utilize. These resources provide material which must be known or searched to determine whether claims of applications are directly anticipated and, therefore, unpatentable under the provisions of [35 U.S.C. 102 \(mpep-9015-appx-I.html#d0e302383\)](#). STIC handbooks, textbooks, periodicals, reports, and other materials assist examiners in deciding the question of patentable invention in cases in which the primary search indicates that there is some novelty as compared to any single reference in the art ([35 U.S.C. 103 \(mpep-9015-appx-I.html#d0e302450\)](#)). These resources enable the examiner to determine whether the features novel in the particular combination searched would be obvious to a person skilled in the art from the general state of knowledge as reflected in the technical literature.

I.STIC COLLECTIONS

A.Books (Electronic and Print)

Based on recommendations by patent examiners and subject area experts, STIC reviews, selects and purchases primarily English-language publications in all fields of applied technology. Collections of e-books, books in print, and trade catalogs are also purchased by STIC for permanent location in specific Technology Centers (TCs). For instance, the Design Patent Art Units have a great many manufacturers' catalogs. Books in print, and e-books may be ordered by examiners by contacting the STIC EIC in each TC. A request for a publication can be submitted by using the NPL Purchase Request Form which is available on the STIC NPL website. The physical location or database resource of all acquired publications are recorded in the STIC Online Catalog so that users will know where to look for a particular publication, be it on the shelf in the EIC or in particular electronic resource or database. All publications, regardless of location, are processed in STIC's Collection Management Service Center.

Reference works including encyclopedias, dictionaries, handbooks, and abstracting and indexing services are also available in print in the EIC. Many are available in electronic form and can be accessed via an electronic resource or database. EIC staff can assist examiners in finding information pertinent to the subject matter of a patent application. STIC does not circulate reference materials. Books in the reference collection are so labeled.

Requests for the purchase of books in print or electronic books are accepted at any time throughout the year, with subsequent purchase dependent on demonstrated need and availability of funds. If an electronic copy of a book in print exists STIC will purchase the electronic copy first.

B.Periodicals

STIC provides access to a large collection of print and electronic resources. Incorporated into the collection are a number of titles pertinent to the examination of design patent applications and titles of interest to nonexamining areas of the U.S. Patent and Trademark Office (USPTO).

Requests for the purchase of new subscription titles are accepted at any time throughout the year, with subsequent purchase dependent on demonstrated need and availability of funds.

Most periodicals are available electronically via the STIC NPL website. Current issues of select periodicals in print are arranged alphabetically and located on shelves near the reference collection in EICs and in Main STIC. Bound periodicals are interfiled with the book collection. Periodicals on microfilm and CD-ROM are housed in cabinets.

C.Foreign Patent Documents

The USPTO receives foreign patent documents through exchange agreements with almost all countries that print or otherwise publish their patent documents. This makes STIC's collection of foreign patent documents the most comprehensive in the United States.

The collection is located in Main STIC. The most current part of the collection is made available to examiners and the public through the USPTO's automated search tools which allow users to look up, view, and print documents. The earliest patent documents, as far back as 1617, and documents from smaller countries are found in the paper collection in the stacks or at remote sites.

Most foreign countries issue official patent and trademark journals corresponding to the *Official Gazette of the United States Patent and Trademark Office*. These journals are shelved under country name. Most countries issue name indexes; some also issue classified indexes. Indexes are shelved with the journals.

The official journals of a few countries include abstracts of the disclosures of the patents announced or applications published.

D.Special Collections

Although STIC still houses substantial print collections, the majority of the collections are now in the form of electronic books, journals, and foreign patents. Many rare and historical book collections have been digitized in order to provide electronic access and preserve the materials. The electronic books and journals are accessible via the STIC NPL website. To locate the NPL Services for Examiners on the USPTO intranet site, go to the Patent Examiner's Toolkit and click on Non-Patent Literature. Collections are arranged by TC and are also accessible by title via the STIC Online Catalog.

Each Electronic Information Center has a small print collection tailored to the art areas covered by the TC.

II.HOW TO LOCATE MATERIALS IN STIC

The STIC Online Catalog

The primary vehicle for locating e-books, e-journals, database and subscription resources, books in print and other materials is the STIC online catalog. The online catalog contains a record of all materials held by the STIC collections, including location, call number, and availability. Examiners can access the online catalog from their desktops via the Patent Examiner's Toolkit or via the STIC NPL website.

Print and electronic materials acquired by STIC are classified according to the Library of Congress classification system. Print materials including books and bound periodicals are intershelved in the stacks according to this classification system. New unbound periodical issues are shelved in a separate area of each EIC, in alphabetical order by title.

III.LOAN POLICY

All STIC materials in print except non-circulating items may be checked out at the Reference Desk in the EIC or Main STIC. Non-circulating material includes reference publications, journals in print, foreign patent documents, and microfilm. Examiners may use

the Department of Commerce Libraries as well as other Federal Government libraries in the area. STIC's staff can answer questions regarding the accessibility and lending practices of other libraries. If books in print are needed from another library for official use, a request can be submitted using the Reference Delivery Request Form available via the STIC NPL website. The Reference Delivery Service Center will process the request on behalf of examiners and deliver the reference upon receipt.

IV. STIC SERVICES

A. Reference Services

STIC's Reference Desk staff assists examiners in the use of the STIC services and its resources. Upon request, they provide guidance on finding information in the electronic and print collections, and updates on the status of service requests. If any problems are encountered in locating materials or finding answers to informational needs, please check with the staff. They are ready and willing to assist. Queries may be made in person or by using STIC Reference Desk contact resources by phone, email, instant message or simply using the Ask-STIC chat-room.

B. Online Text/Prior Art and Bibliographic Searches

STIC staff located in the EICs in each TC perform prior art and bibliographic searches for examiners using commercial databases (CDBs) and subscription resources STIC staff access many CDBs such as ProQuest Dialog, Scientific and Technical Network (STN), Questel-Orbit, IP.com and others. When they are identified as meeting the needs and requirements of the Office, new database vendors are added. A list of the databases offered by each vendor is available on the vendors' websites.

CDBs extensively cover the fields of knowledge examined by USPTO, and make it possible for expert search staff to retrieve bibliographic information e.g. title, author, publication date, source, language etc., and may also include abstracts, chemical structures, and DNA sequences. Often the full text of the articles, depending on the database can be provided in PDF or other electronic formats.

CDBs and other subscription resources provide access to non-patent literature that is typically not available on the Internet, and require expert knowledge in order to use special indexing, perform complex chemical substance and structure searches, and classification search systems that improve retrieval. Examiners can submit a request for a prior art/text search by using the Text/Regular Form on the STIC NPL website. For bibliographic searches, examiners may submit a request for a legal/litigation search by using the Legal/Litigation Form. Patent Family searches may be requested by using the Text/Regular Form or contacting the Reference Desk staff in the EIC. Completed searches are emailed to the examiners.

Online searching of nucleic and amino acid sequences is conducted by the staff of the STIC EIC for TC1600 through the use of an in-house computer system developed for this purpose. On an as-needed basis, introductory classes are conducted by STIC staff to assist examiners in understanding the sequence search results. Examiners can also conduct this search on their own via the in-house ABSS search system.

Examiners may also conduct searches of online commercial databases independently of STIC staff. Once approval for a commercial database login and password from the supervisory patent examiner (SPE) has been obtained, training by the vendor is provided through STIC's Digital Resources Division. Individual assistance in searching these databases is also available from the Electronic Information Centers (EIC) staff, especially for searching chemical structures and DNA sequences.

C. Foreign Patent Services

The staff of the Foreign Patents Service Center of the STIC is available to assist with any problem or informational need regarding foreign patent document retrieval or foreign patent documents. These services are also available to examiners in the Electronic Information Centers.

Online patent family searches are performed for patent examiners by the Foreign Patents Service Center. The services provided include: identification of English-language or preferred-language equivalents; determination of priority dates and publication dates; searches by inventor name or abstract number; other patent family and bibliographic document retrieval searches; and foreign classification information.

Examiners who choose to perform their own foreign patent searches after receiving appropriate training through the Office of Patent Training can consult foreign patent experts for difficult document retrieval searches.

The staff of the Foreign Patents Service Center can supplement the online document retrieval searching effort with manual searches of foreign patent journals, including *Official Gazette(s)*, patent concordances, and/or indexes. The staff also provides training in the use of the Foreign Patents Access System (FPAS) in EAST/WEST and the use of the foreign patent collections.

SPECIAL NOTE: Members of the public can order copies of foreign patent documents from the Foreign Patents Service Center.

D. Translations

Examiners may consult the translators in the Translations Service Center of STIC for oral assistance in translating foreign language patents and foreign document sources that may be possible references for applications being examined. Oral translations are performed for the major European languages and for Japanese. Examiners may also request written translations of pertinent portions of references being considered for citation or already cited in applications. Full translations are also made upon request. Written translations can be made from virtually all foreign languages into English. See also [MPEP § 901.05\(d\) \(s901.html#d0e110750\)](#).

The Translations Service Center maintains a database of all previously completed document translations. Patent translations are indexed by country and patent number; articles are indexed by language and author or title. Any copies of translations coming to examiners from outside the Office should be furnished to the Translations Service Center so that it may make copies for its files.

E. Interlibrary Loans

When needed for official business purposes, STIC will borrow from other libraries materials not available in-house. Requests can be submitted to the STIC facility in an examiner's TC or via the electronic form on the STIC NPL website. STIC has borrowing agreements with libraries throughout the U.S.

F. On-Site Photocopying

For the convenience of the Examining Corps, photocopy machines are available for employee use in STIC. These are to be used for photocopying STIC materials which do not circulate, or for materials which examiners do not wish to checkout.

G.Obtaining Publication Dates

Requests pertaining to the earliest date of publication or first distribution to the public of publications should be made to the STIC EIC facility in the examiner's TC. For U.S. publications, the staff can obtain the day and month of publication claimed by the copyright owner. The same information can be obtained for foreign publications through correspondence although it will take a little longer.

H.Tours

Special tours of the STIC and its service centers can be arranged for examiners or for outside groups by contacting the STIC EIC facility in the examiner's TC.

901.06(b) Borrowed Publications [R-07.2015]

See [MPEP § 901.06\(a\) \(s901.html#d0e113260\)](#), STIC Services - Interlibrary Loans.

901.06(c) Alien Property Custodian Publications [R-07.2015]

Applications vested in the Alien Property Custodian during World War II were published in 1943 even though they had not become patents.

Care must be taken not to refer to these publications as patents; they should be designated as A.P.C. published applications.

An A.P.C. published application may be used by the examiner as a basis for rejection only as a printed publication effective from the date of publication, which is printed on each copy.

The manner of citing one of these publications is as follows: A.P.C. Application of, Ser. No., Published

The Patent Search Room contains a complete set of A.P.C. published applications arranged numerically in bound volumes. The U.S. A.P.C. bib data is located on the following database (2964 total): <http://db.library.queensu.ca/apcdocuments/> (<http://db.library.queensu.ca/apcdocuments/>).

901.06(d) Abstracts, Abbreviations, and Defensive Publications [R-08.2017]

Abstracts and Abbreviations are U.S. Patent and Trademark Office publications of abandoned applications. Defensive Publications (the O.G. defensive publication and search copy) are U.S. Patent and Trademark Office publications of provisionally abandoned applications wherein the applicant retains their rights to an interference for a limited time period of 5 years from the earliest effective U.S. filing date. On May 8, 1985, the U.S. Patent and Trademark Office stopped accepting Defensive Publication requests and began accepting applications for Statutory Invention Registrations (SIRs), although there was an overlap period where both Defensive Publications and Statutory Invention Registrations were processed; see [MPEP § 711.06 \(s711.html#d0e84209\)](#) and [§ 711.06\(a\) \(s711.html#d0e84305\)](#). Statutory Invention Registrations replaced the Defensive Publication program. However, requests for a statutory invention registration filed on or after March 16, 2013 will not be processed, as the provisions of pre-AIA [35 U.S.C. 157 \(mpep-9015-appx-I.html#d0e304339\)](#) governing Statutory Invention Registrations were repealed. See [MPEP § 1101 \(s1101.html#ch1100_d1ffb9_1bea0_213\)](#). Statutory Invention Registrations are numbered with document category "H," beginning with "H1." Defensive Publications and Statutory Invention Registrations are included in subclass lists and subscription orders.

Distinct numbers are assigned to all Defensive Publications published December 16, 1969 through October 1980.

T 869 001
 └─ Number series, 001–999 available monthly
 └─ O.G. volume number
 └─ Document category "T" denotes Technical Disclosure.

For Defensive Publications published on and after November 4, 1980, a different numbering system is used.

T XXXX XX
 └─ Sequential Document Number
 └─ O.G. volume number
 └─ Document category "T" denotes Technical Disclosure

A conversion table from the application serial number to the distinct number for all Defensive Publications published before December 16, 1969 appears at 869 O.G. 687. The distinct numbers are used for all official reference and document copy requirements.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' REPLY IN SUPPORT OF MOTION IN LIMINE No. 1
TO PRECLUDE JAPANESE UTILITY MODEL
PUBLICATION No. 1992-136787 ("SATO") AS PRIOR ART**

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Attorneys for Plaintiff

April 8, 2019

Defendants incorrectly argue that “[t]he standard under § 102 is not dependent on what a searcher could reasonably find.” (Defs. Br. at 2). The Federal Circuit has explicitly held that a reference is publicly accessible under § 102 only “to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194-95 (Fed. Cir. 2008). It is not sufficient for Defendants to simply cite Patent Office rules, because the Federal Circuit has held that the determination of whether a document was publicly accessible under § 102 “must be approached on a case-by-case basis.” *Id.* (citations omitted). Defendants have the burden of proving public accessibility by clear and convincing evidence. *See, e.g., Microsoft Corp. v. i4i Ltd. P’ship*, 131 S. Ct. 2238, 2253 (2011) (Breyer, J., Scalia, J., Alito, J. concurring).

Defendants do not dispute that their own expert searchers were unable to locate Sato, *in 2014*, let alone in the relevant time period.¹ Defendants cite to MPEP § 901.05, which states that “*all foreign . . . published applications . . . which have been disseminated to the public* are available to U.S. examiners.” Def. Ex. C at 1. Yet Defendants’ search expert declared that he “performed an exhaustive electronic search” using “*the same search tools used by PTO Examiners*” and could not locate Sato. Pl. Ex. C, ¶¶ 10-13; *id.* ¶ 16 (“Even having the exact reference number for Sato, it cannot be found in any PTO internal prior art database.”).²

Defendants cannot meet their burden of proving by clear and convincing evidence that the Sato reference was publicly accessible to “persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence” as of the priority date of the ’150, ’658, and ’662 patents, and should not be permitted to argue to the jury that it is a printed publication under § 102.

¹ Defendants’ Ex. B is the 2006 version of the Japan Utility Model Act. To the extent the Act is relevant here at all, the only relevant version is the one that was in effect in 1992.

² Similarly, the Derwent World Patents Index also used by examiners includes only Japan utility models published after January 2008. Ex. 1.

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April 8, 2019

EXHIBIT 1

Derwent World Patents Index

Japan (JP) Coverage**Patent Office Details**

Japan Patent Office
3-4-3 Kasumigaseki
Chiyoda-ku Tokyo
100-8915, Japan

Web: www.jpo.go.jp

Official gazette: *Patent and Utility Model Gazette*

Kinds of Protection

Patents of Invention	Granted for a term of 20 years from submission date
Extensions	Extensions of up to five years for pharmaceutical, veterinary and agrochemical patents
Utility models	Granted for a term of 10 years from the application date (six year term prior to 01.01.2005; 10-15 year term prior to 1994)
Industrial Designs and Models	May be registered

Convention & Treaty Membership

Patent Cooperation Treaty	01.10.1978
Signatory of:	Paris Convention (Stockholm wording) Budapest Treaty World Intellectual Property Organization International Convention for the Protection of New Varieties of Plants

Filing for Patents

Inventions are patentable. The patent office considers animals to be patentable. Computer programs can also claim protection.

Applications may be made, in Japanese, by the invention or his legal successor. Foreign applicants must designate a Japanese representative. From January 1996, the Japanese Patent Office has allowed filing in English, although patentees still have to supply a translation in Japanese within 23 months. The English version is the final arbiter in disputes on quality of translations affecting scope of invention.

The application is laid open to public inspection after 18 months from the date of filing, or the earliest priority date, if priority has been claimed and is published in the patent gazette. Upon acceptance the complete examined specification is published in the official gazette.

Since 29.05.1996 Japan had a post grant opposition system with an opposition period of six months from the date of publication of the granted patent. Prior to that opposition to the grant of a patent had to be made within three months of the date of publication of the application.

As of 01.01.2004, the opposition system was consolidated and integrated into the appeal for invalidation systems.

Patents published from 14 May 2014 may be subject to a new opposition procedure which must be filed within 6 months of the publication of the patent gazette announcing the grant. Patentees (but not opponents) may appeal the decision to the IP High Court.

DWPI Coverage

Kind	DWPI Start Dates
A Unexamined OPI application	1963
B Examined accepted specification	1963
B1 Examined accepted spec not published as unexamined	14 August 1996
B2 Examined accepted spec previously published as unexamined	23 December 1982
U Utility Model	10 January 2008
W PCT transfer (origin abroad)	12 March 1981
X PCT transfer (origin Japan)	5 March 1981
Y PCT transfer to utility model (origin abroad)	30 April 1981
Z PCT transfer to utility model (origin Japan)	11 March 1982

Notes:

Due to the volume of Japanese documents published each year, DWPI initially only included Japanese documents based on the International Patent Classification (IPC):

Unexamined applications (A documents)

Chemical patents Included for the start dates above
 Electrical patents Included from 1981
 Other patents Included from update 199548

Examined specifications (B documents)

Chemical patents Included for the start dates above
 Electrical patents Included from publication date 7 July 2004
 Other patents Included from publication date 7 July 2004
 Full details are given in the appendix.

DWPI Data elements online	Notes
✓ Bibliographic data	Inventor names are included from 1977, except where the record is expected to become equivalent, such as PCT derived applications and B2 documents
✓ English value-add title and abstract	
✓ Original title and abstract	Title (machine translation) from 1975 onwards. Abstract (machine translation) from 200824 onwards
✓ Claims	Main claim (machine translation) from 200824 onwards
✓ Manual Codes	Chemical (CPI) and Electrical (EPI)
✓ Chemical Indexing	DCR, Chemical Fragmentation, Polymer and Markush

Numeration**Kind Codes – A**

Publication Numbers				
Original Data	Derwent Innovation	Dialog	Questel	STN
<i>Published up to 8 January 1989 (Showa Era)</i>				
XX-Nnnnnn	JPXXnnnnnn	JP XXnnnnnn	JPXXNNNNNN	JPXXnnnnnn
60-36354	JP60036354	JP 60036354	JP60036354	JP60036354
<i>Published from 9 January 1989 to 2000 (Heisei Era)</i>				
xx-Nnnnnn	JPxxnnnnnnA	JP xxnnnnnn	JPXXnnnnnn	JPXXnnnnnn
8-92277	JP8092276	JP 8092276	JP08092276	JP08092276
<i>Published from 2000 onwards</i>				
YYYY-Nnnnnn	JPYYYYnnnnnn	JP YYYYnnnnnn	JPYYYYnnnnnn	JPYYYYnnnnnn
2000-34521	JP2000034521	JP 2000034521	JP2000034521	JP2000034521

Application Numbers*				
Original Data	Derwent Innovation	Dialog	Questel	STN
<i>Published up to 8 January 1989 (Showa Era)</i>				
XX-Nnnnnn	JPXXNnnnnnA	JP YYYYNnnnnn	YYYYJP-nnnnnnn	JPYYYY-Nnnnnn
59-97410	JP198497410A	JP 198497410	1984JP-0097410	JP1984-97410
<i>Published from 9 January 1989 to 2000 (Heisei Era)</i>				
xx-Nnnnnn	JPYYYYNnnnnnA	JP YYYYNnnnnn	YYYYJP-nnnnnnn	JPYYYY-Nnnnnn
6-1230	JP19941230A	JP 19941230	1994JP-0001230	JP1994-1230
<i>Published from 2000 onwards</i>				
YYYY-Nnnnnn	JPYYYYNnnnnnA	JP YYYYNnnnnn	YYYYJP-nnnnnnn	JPYYYY-Nnnnnn
2011-10124	JP201110124A	JP 201110124	2011JP-0010124	JP2011-10124

*Full coverage of application numbers commenced from DWPI update 199216

XX	2 digit Japanese Imperial year
xx	1 or 2 digit Japanese Imperial year
YYYY	4 digit Western year
Nnnnnn	1 to 6 digit serial number
nnnnnnn	7 digit serial number

Notes:

Whilst the Japanese year officially begins on 1 January each year, the actual calculation of the Imperial year is based on the Emperor's reign:

Showa Era	To 8 January 1989	Imperial Year: Western year minus 25	Example: 1988 Western year = 63 Imperial year
Heisei Era	From 9 January 1989	Imperial Year: Western year minus 88	Example: 1992 Western year = 4 Imperial year

When the Era changed the serial part of the application numbers formed part of a continuous series and did not revert to 1. The last application under the Showa Era was serial number 3200 (JP64003200-A) .

Printed applications issued by the Japanese Patent Office carried the year 64 until their changeover was completed on 11 April 1989. DWPI has converted these years to the Heisei Imperial year from serial number 3201 onwards

Kind Codes – B, B1, B2

Publication Numbers				
Original Data	Derwent Innovation	Dialog	Questel	STN
Published up to 29 May 1996				
XX-Nnnnnn	JPYYNNNNNN	JP YYNNNNNN	JPYYNNNNNN	JPYYNNNNNN
8-22870	JP96022870	JP 96022870	JP96022870	JP96022870
Published from 29 May 1996 (continuous series from 2500001)				
nnnnnnn	JPnnnnnnn	JP nnnnnnn	JPnnnnnnn	JPnnnnnnn
4600023	JP04600023	JP 4600023	JP4600023	JP4600023

XX 1 or 2 digit Japanese Imperial Year
 YY or YYYY 2 or 4 digit Western year
 NNNNNN 6 digit serial number
 nnnnnnn 7 digit serial number

See note above on how to convert Japanese Imperial years to Western years

Kind Codes – U

Publication Numbers				
Original Data	Derwent Innovation	Dialog	Questel	STN
nnnnnnn	JPnnnnnnnn	JP nnnnnnn	JPnnnnnnnnU	JPnnnnnnnnU
3138458	JP3138458U	JP 3138458	JP3138458U	JP3138458U

nnnnnnn 7 digit serial number
 U denotes utility model

Application Numbers				
Original Data	Derwent Innovation	Dialog	Questel	STN
UYYYY-Nnnnnn	JPYYYYNnnnU	JP YYYYYNnnn	YYYYJP-Unnnnnn	JP YYYYY-NnnnU
U2007-8196	JP20078196U	JP 20078196	2007JP-U008196	JP 2007-8196U

YYYY 4 digits representing the year of application
 U denotes utility model
 Nnnn 1 to 4 digit serial number
 nnnnnn 6 digit serial number

Kind Codes – W, X, Y, Z (PCT transfers)

Publication Numbers				
Original Data	Derwent Innovation	Dialog	Questel	STN
<i>Published up to 8 January 1989 (Showa Era)</i>				
XX-NNNNNN	JPXXNNNNNN	JP XXNNNNNN	JPXXNNNNNN	JPXXNNNNNNK
S63-500143	JP63500143	JP 63500143	JP63500143	JP63500143W
<i>Published from 9 January 1989 to 2000 (Heisei Era)</i>				
xx-NNNNNN	JPxxNNNNNN	JP xxNNNNNN	JPXXNNNNNN	JPXXNNNNNNK
H8-518608	JP8518608	JP 8518608	JP08518608	JP08518608X
<i>Published from 2000 onwards</i>				
YYYY-NNNNNN	JPYYYYNNNNNN	JP YYYYYNNNNN	JPYYYYNNNNNN	JPYYYYNNNNNN
2003-534853	JP2003534853	JP 2003534853	JP2003534853	JP2003534853

Application Numbers*				
Original Data	Derwent Innovation	Dialog	Questel	STN
<i>Published up to 8 January 1989 (Showa Era)</i>				
XX-NNNNNN	JPYYYYNNNNNNA	JP YYYYYNNNNN	YYYYJP-nnnnnnn	JPYYYY-NNNNNN
61-502974	JP1986502974A	JP 1986502974	1986JP-0502974	JP1986-502974
<i>Published from 9 January 1989 to 2000 (Heisei Era)</i>				
xx-NNNNNN	JPYYYYNNNNNNA	JP YYYYYNNNNN	YYYYJP-nnnnnnn	JPYYYY-NNNNNN
3-600008	JP1992600008A	JP 1992600008	1992JP-0600008	JP1992-600008
<i>Published from 2000 onwards</i>				
YYYY-nnnnnn	JPYYYYNNNNNNA	JP YYYYYNNNNN	YYYYJP-nnnnnnn	JPYYYY-NNNNNN
2002-500018	JP2002500018A	JP 2002500018	2002JP-0500018	JP2002-500018

XX	2 digit Japanese Imperial year
xx	1 or 2 digit Japanese Imperial year
YYYY	4 digit Western year
K	Kind code
NNNNNN	6 digit serial number beginning with: 5 for kinds W, X and Y; 6 for kind Z
nnnnnnn	7 digit serial number

Appendix – DWPI coverage of Japanese patents by International Patent Classification (IPC)

IPC	Section	DWPI Coverage
A	Human necessities A01, A21-24, A41-47, A61-63, A99	A01G, , A01JK, A01M, A01N*, A21*, A22*, A23*, A24B, A24D, A41F, A41G, A42B, A42C, A42D, A44B, A47J, A47K, A47L, A45D, A61B, A61C, A61F, A61J, A61K*, A61L, A61M, A62C, A62D
B	Performing operations; transporting B01-09, B21-32 B41-44, B60-68, B81-82, B99	B01*, B03, B04, B05, B07B, B21B, B21C, B21H, B21J, B21K, B22, B23K, B27K, B29*, B32, B41D, B41M, B41N, B60C, B65H
C	Chemistry; Metallurgy C01-14, C21-23 C25, C30, C40, C99	C*
D	Textiles; Paper D01-07, D21, D99	D*
E	Fixed constructions E01-06, E21, E99	E21B
F	Mechanical Engineering; Lighting; Heating; Weapons; Blasting F01-04, F15-17 F21-28, F41-42, F99	F17C, F22B, F25, F26, F27, F28, F42B,
G	Physics G01-12, G21, G99	G01N31/00-33/44*, G01N33/48-50*, G03CG, G21*
H	Electricity H01-05, H99	H

NOTES:

1. 100% coverage of all applications from 199548.
2. IPCs marked with asterisks (*) are guaranteed to have DWPI abstracts. Otherwise entries are either DWPI abstracts or DWPI enhanced titles.
3. Selection can take place from other IPCs if of chemical importance.
4. From 200450 (publication date 07.07.2004), the DWPI coverage of JP-B was extended to include all technologies.

Coverage of Japanese unexamined documents was extended to all technologies during 1995, phased in as follows:

IPC	DWPI Update
B60, B65-B68, F01, F02N, F02P, F16, F17	199528
B02-B09, G06, G11	199532
B21-B28, B30-B32, B41-B44, F21-F41	199536
B61-B64, E01-E21, F02-F15	199540
G01-G12	199544
A01-A47, A61-A63	199548

PRETRIAL ORDER

EXHIBIT 14

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

PLAINTIFFS' MOTION IN LIMINE NO. 2
TO EXCLUDE REFERENCE TO DEFENDANTS' PATENTS

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March 26, 2019

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Attorneys for Plaintiff

Plaintiff f'real Foods, LLC ("f'real") respectfully moves to preclude Defendants from introducing testimony or evidence at trial related to any of their patents, including Hamilton Beach's U.S. Patent No. 8,807,823 ("823 patent"). Any probative value of Hamilton Beach's patents is substantially outweighed by unfair prejudice, confusion of the issues, or the potential to mislead the jury into believing that Hamilton Beach's patents give Hamilton Beach the right to practice the disclosed technology even though that technology is covered by f'real's patents. Fed. R. Evid. 402-403.

For these reasons, courts generally preclude an accused infringer from introducing evidence of their own patents at trial. *See, e.g., Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.*, 265 F.3d 1294, 1309 (Fed. Cir. 2001) (district court did not err in excluding as irrelevant infringer's patents); *Glaros v. H.H. Robertson Co.*, 797 F.2d 1564, 1572-73 (Fed. Cir. 1986) (affirming the exclusion of the infringer's patents under Fed. R. Evid. 403); *Sonos, Inc. v. D&M Holdings Inc.*, 2017 WL 5633204, *1 (D. Del. 2017) (Bryson, C.J., sitting by designation) (precluding accused infringer from referencing any of its own patents at trial because "[t]he fact that D&M has patents in the same technological field is not a defense to infringement, but could mislead the jury into believing that D&M's patents give it the right to practice technology that is covered by those patents even though it is also covered by Sonos's patents.")).

At trial, the jury will be asked to decide whether Defendants infringed four f'real patents collectively directed to blenders (and related methods) capable of reconstituting a frozen milkshake and cleaning itself after the blending process is complete. Years after f'real's patents were issued, Hamilton Beach obtained a narrow improvement patent directed to a reciprocating blender carriage (i.e., the '823 patent). Infringement of f'real's patents-in-suit does not depend upon whether there is a reciprocating blender carriage or not. During a meet and confer on

March 21, 2019, Defendants' counsel made little effort to disguise their desire to confuse the jury into believing that Defendants are not infringing f'real's patents-in-suit because Hamilton Beach was issued a later improvement patent, and that its blenders practice that patent. It is well established as a matter of law that this line of argument is wholly improper.

"The existence of one's own patent does not constitute a defense to infringement of someone else's patent. It is elementary that a patent grants only the right to exclude others and confers no right on its holder to make, use, or sell." *Bio-Technology General Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1559 (Fed.Cir. 1996), *citing Vappel Textilmashinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870 (Fed. Cir. 1991); *Atlas Powder Company v. E.I. du Pont de Nemours & Co.*, 750 F.2d 1569, 1580 (Fed.Cir. 1984) ("[W]here defendant has appropriated the material features of the patent in suit, infringement will be found even when those features have been supplemented and modified to such an extent that the defendant may be entitled to a patent for the improvement.").

Because there is a common misconception by the public that a patent grants an affirmative right to make the patented article, it is important for the trial court to preclude evidence or testimony concerning Defendants' own patents under F.R.E. 402 and 403. *EZ Dock, Inc. v. Schafter Systems, Inc.*, 2003 WL 1610781, at *11 (D.Minn. March 8, 2003); *Cameco Industries, Inc. v. Louisiana Cane Mfg., Inc.*, 1995 WL 468234, at *5-6 (E.D. La. July 27, 1995) ("Moreover, the Court finds that admission of the patent or patent application would be unfairly prejudicial to the plaintiff, as this evidence is likely to give the jury the false impression that a patent on the accused machine means that it is substantially different from the machine claimed in plaintiff's patent").

During the parties' meet and confer, the only basis that counsel for Defendants argued

for using the '823 patent at trial was that it is supposedly linked to Hamilton Beach's design and engineering work on the infringing blenders. Nonetheless, there are thousands of other technical documents produced by Hamilton Beach during discovery that could be used to demonstrate its design and engineering work on the infringing blenders that do not carry the risk of confusing or misleading the jury.¹ Defendants' attorneys were not interested in using alternative technical documents (*e.g.*, CAD drawings, technical manuals, published patent applications, etc.) even if such technical documents contain the same technical disclosure as the '823 patent itself.

Defendants' attorneys were unable to articulate any coherent reason why they needed to use the '823 patent instead of documents with the same or virtually the same technical disclosure. The obvious reason Defendants' attorneys insist on using the '823 patent itself is to confuse and mislead the jury into believing that the '823 patent gives them the unfettered right to infringe the earlier pioneering patents of f'real and everyone else. This is exactly the reason trial courts routinely exclude evidence related to an accused infringer's patents and why the Court should do so in this case.²

¹ See *Louisiana Cane*, 1995 WL 468234, at *5-6 ("To this end, Louisiana Cane argues that the patent is relevant because the application submitted in support of the patent details differences between its machine and the machine claimed in plaintiff's patent. However, Louisiana Cane concedes that this same information can be presented through other means.").

² Defendants' counsel proposed that a limiting jury instruction could be used to remedy the mischief they intend to create with the '823 patent. Nonetheless, courts correctly recognize that it is necessary to prevent the mischief in the first place rather than groping for a band-aide after the damage has been done. See *EZ Dock, Inc.*, 2003 WL 1610781, at *11; *Cameco Industries, Inc.*, 1995 WL 468234, at *5-6.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	
)	

**DEFENDANTS' RESPONSE TO PLAINTIFFS' MOTION *IN LIMINE* NO. 2 TO
EXCLUDE REFERENCE TO DEFENDANTS' PATENTS**

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Dated: April 2, 2019

Counsel for Defendants

Plaintiffs greatly overstate the willingness of courts to exclude a defendant's own patents, and premise their Motion on the false notion that Defendants will argue or imply (or the jury will believe) that Hamilton Beach's '823 Patent provides a defense to infringement. Defendants *will not* argue that the '823 Patent constitutes a defense to infringement. And the parties *have agreed upon* a jury instruction that says that ownership of another patent is not a defense to patent infringement.¹ Hamilton Beach's '823 Patent—which is relied upon by *Plaintiff's own technical expert* to prove infringement—provides relevant, competent evidence for a host of other pertinent issues, reasons for which an accused infringer's patents are routinely admitted at trial, such as evidence of: the operation of the accused products; secondary considerations of obviousness; and damages.² Plaintiffs fail to justify their blanket request to exclude Hamilton Beach's patent *in toto*, thus their Motion should be denied.³

As a threshold matter, courts do not “generally preclude” an accused infringer's own patents from trial. To the contrary, when an accused infringer's own patents are shown to have relevance, they are admitted (and an instruction is often given). *See, e.g., In re Biogen*, C.A. No. 10-2734, 2018 WL 3613162, at *6-7 (D.N.J. July 26, 2018) (denying motion to exclude accused infringer's patents that cover accused products, because “a blanket pretrial ruling . . . for any and all purposes is inappropriate” and the court “can head off any jury confusion by employing appropriate jury instructions”); *Texchem Adv. Prods. Inc. Sdn. Bhd. v. e.PAK Int'l Inc.*, C.A. No. 12-1341, 2014 WL 12589656, at *4 (C.D. Cal. Jun. 11, 2014) (holding that the defendant's patent is relevant “to illustrate features of [defendant's] accused products” and that “[a]ny potential

¹ *See* Ex. A at 18. Moreover, as expressed at the meet-and-confer, Defendants are willing to address any legitimate concerns regarding Hamilton Beach's '823 Patent in a limiting instruction.

² Evidence can be admissible for multiple purposes, and just because evidence is inadmissible for one purpose does not render it inadmissible for all purposes. *See* Fed. R. Evid. 105.

³ Plaintiffs' misrepresents the parties' meet and confer, during which Defendants provided multiple reasons why the '823 Patent is relevant and admissible. *See* DiGiovanni Declaration ¶¶ 2-6.

prejudice may be mitigated by a proper limiting instruction”).⁴

Here, the ’823 Patent is inextricably linked to Hamilton Beach’s work on the accused products, it illustrates the pertinent features of those products, and it demonstrates the steps and timeline of their development as shown in deposition testimony designated by Plaintiffs.⁵ Indeed, the ’823 Patent is so intertwined with the accused products that *Plaintiffs* use the ’823 Patent to try to prove its infringement case via its expert. *See* Def’s Motion *in Limine* No. 3, Ex. E at 79.^{6,7}

The ’823 patent is also relevant to secondary considerations of obviousness, namely Plaintiffs’ contention that Defendants “copied” the claimed inventions. The allegation of “copying” makes Hamilton Beach’s independent research and development of its accused products that resulted in the ’823 Patent highly relevant to rebut Plaintiffs’ contention that Defendants are mere copyists that relied on Plaintiffs’ technology. *See Retractable Techs. Inc. v. Becton,*

⁴ Courts routinely deny plaintiffs’ motions *in limine* to exclude evidence or argument regarding defendants’ patents, finding that the probative evidentiary value of defendants’ patents outweighs any potential for prejudice or confusion, which can be remedied by a limiting jury instruction. *See, e.g., Wonderland Nurserygoods, Co. v. Thorley Ind., LLC*, C.A. No. 12-196, 2014 WL 241751, at *3-4 (W.D. Pa., Jan. 22, 2014); *Finjan, Inc. v. Sophos, Inc.*, C.A. No. 14-1197-WHO, 2016 WL 4560071, at *8 (N.D. Cal. Aug. 22, 2016); *Carnegie Mellon Univ. v. Marvell Tech. Gp., Ltd.*, C.A. No. 09-290, 2012 WL 5416440, at *2 (W.D. Pa. Nov. 2, 2012); *Judkins v. HT Window Fashion Corp.*, C.A. No. 07-251-GCC, 2009 WL 3400989, at *1 (W.D. Pa., Oct. 19, 2009).

⁵ *See, e.g.,* Ex. B (Pryor Dep. 29:22-33:5, 35:24-47:24, 53:3-18); Ex. C (Williams Dep. 111:10-113:15, 114:20-115:7). In the Williams deposition, the ’823 Patent is mistakenly referred to as the “’723 Patent.” *See* Tr. at 110:5-111:5.

⁶ Plaintiffs’ expert’s own affirmative use of the ’823 Patent should by itself bar preclusion as Defendants must be able to cross-examine him on his infringement bases.

⁷ The cases Plaintiffs cite do not compel otherwise. In *Cameco Indus., Inc. v. Louisiana Cane Mfg., Inc.*, 1995 WL 468234, at *5-6 (E.D. La. July 27, 1995), defendant’s *only* basis for introducing its patent was that it was evidence that the accused device did not directly infringe plaintiff’s patent. In *Glaros v. H.H. Rovertson Co.*, 797 F.2d 1564, 1572-73 (Fed. Cir. 1986), the Federal Circuit simply found that the district court did not abuse its discretion in excluding evidence of the defendant’s patent, without discussing the relevance of the patent for all of the reasons present in this case. Even in *Sonos, Inc. v. D&M Holdings Inc.*, 2017 WL 5633204, at *1 (D. Del. Nov. 21, 2017), the Court recognized that defendant’s patents may be used if patentee “opens the door to any such evidence, such as by stating that [defendant] lacks its own technology and therefore must rely on stealing technology.”

Dickinson & Co., C.A. No. 07-250, 2009 WL 8725107, at *8 (E.D. Tex. Oct. 8, 2009) (“[D]efendants should be allowed to present evidence of independent development to rebut allegations that Defendant willfully infringed or that Defendant copied Plaintiffs’ technology.”); *Carnegie Mellon*, 2012 WL 5416440, at *2 (holding defendants’ patents relevant to assessing the existence of “acts of copying/willfulness”).

The ’823 Patent is also relevant to the determination of a reasonable royalty. One of the *Georgia-Pacific* factors considers “the portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or *significant features or improvements added by the infringer*.” See Ex. A at 60-61 (the parties’ agreed-upon jury instruction, emphasis added). It is also well-established that the apportionment of damages should take into account “inventions covered by patents other than” the asserted patent. *Keystone Mfg. Co. v. Adams*, 151 U.S. 139, 147 (1894).⁸ Hamilton Beach’s ’823 Patent is directly relevant to these issues.

In sum, the ’823 Patent is relevant for numerous independent reasons, any one of which is sufficient to deny Plaintiffs’ Motion. Any risk of prejudice to Plaintiffs from admitting the ’823 Patent is minimal compared to the unfair prejudice that would befall Defendants if it were not admitted, for the reasons discussed above, and the risk of prejudice can be addressed with a limiting jury instruction.⁹

⁸ See, e.g., *GlaxoSmithKline LLC v. Teva Pharms USA, Inc.*, C.A. No. 14-878-LPS-CJB, Dkt. 379 at 1-2 (D. Del. May 25, 2017); *Wonderland*, 2014 WL 241751, at *3-4; *Carnegie Mellon*, 2012 WL 5416440, at *2; *Retractable Techs.*, 2009 WL 8725107, at *8 (denying plaintiff’s motion *in limine* because “evidence of Defendant’s development efforts and intellectual property, including patents, may be relevant to a reasonable royalty analysis”).

⁹ Indeed, Plaintiffs’ suggestion that Defendants can use other technical documents in lieu of the ’823 Patent would unfairly hamstring Defendants’ case by preventing the use of the ’823 Patent for the legitimate purposes discussed herein.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS
CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and HERSHEY
CREAMERY COMPANY

Defendants.

C.A. No. 16-41-CFC

CONSOLIDATED

**DECLARATION OF FRANCIS DIGIOVANNI IN SUPPORT OF
DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION *IN LIMINE* NO. 2**

I, Francis DiGiovanni, declare:

1. I am a licensed attorney with the law firm of Drinker Biddle & Reath LLP, counsel for defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively "Defendants") in the above-captioned action. I am admitted to practice in this District, I am over 18 years of age, and have personal knowledge of the matters stated in this declaration and would testify truthfully to them if called upon to do so. I submit this declaration in support of Defendants' Opposition to Plaintiffs' Motion *in Limine* No. 2, filed contemporaneously herewith.

2. On March 18, 2019, the parties exchanged lists of potential motions *in limine* that they would present in the pretrial order. Plaintiffs' list included the following potential motion: "3. No reference to Hamilton Beach's own patents."

3. On March 21, 2019, counsel for the parties held a telephonic meet and confer regarding the parties' proposed motion *in limine*. During the meet and confer, counsel for the parties discussed Plaintiffs' proposed motion *in limine* No. 3.

4. Plaintiffs' statement in its Motion *in Limine* No. 2 (formerly No. 3) that "[d]uring the parties' meet and confer, the only basis that counsel for Defendants argued for using the '823 patent at trial was that it is supposedly linked to Hamilton Beach's design and engineering work on the infringing blenders" is not accurate.

5. During the discussion, which was attended and witnessed by defense counsel William Foster, Thatcher Rahmeier, Briana Silverstein, and me, I stated various grounds as to the relevance and admissibility of Hamilton Beach's '823 patent. Specifically, I stated that: the Hamilton Beach patent is deeply linked to Hamilton Beach's design work on the accused products and that the patent is helpful to understand Hamilton Beach's design; the fact that Hamilton Beach's design led to the issuance of its own patent rebuts Plaintiffs' allegations of copying; and the patent is relevant to damages under at least one *Georgia-Pacific* factor. My co-counsel, William Foster, also noted on the call that the patent was used extensively by both parties at various depositions in this case.

6. Plaintiffs' additional statement in their motion that "Defendants' attorneys were unable to articulate any coherent reason why they needed to use the '823 patent instead of documents with the same or virtually the same technical disclosure" is inaccurate. Defendants provided multiple reasons, as set forth above.

7. Attached hereto as Exhibit A is a true and correct copy of a redline of the parties' [Proposed] Final Jury Instructions in this action.

8. Attached hereto as Exhibit B is a true and correct copy of excerpts of the deposition transcript of Ernest Pryor, taken in this action.

9. Attached hereto as Exhibit C is a true and correct copy of excerpts of the deposition transcript of Brian P. Williams, taken in this action.

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed this 2nd day of April, 2019, in Wilmington, Delaware.

/s/ Francis DiGiovanni

Francis DiGiovanni, Esq.

francis.digiovanni@dbr.com

DRINKER BIDDLE & REATH LLP

EXHIBIT A

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)
RICH PRODUCTS CORPORATION,)

Plaintiffs,)

v.) C.A. No. 16-41 (CFC)
) CONSOLIDATED

HAMILTON BEACH BRANDS,)
INC., HERSHEY CREAMERY)
COMPANY and PAUL MILLS d/b/a)
MILLS BROTHERS MARKETS)

Defendants.)

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[PROPOSED] FINAL JURY INSTRUCTIONS

the infringement or invalidity issues that you are being asked to decide. These issues are yours to decide.

Although I have only construed ~~and the Asserted Patents only define~~ some of the claim terms, it is important to understand that a patent claim is infringed only if an accused product includes each and every element in that patent claim. For any other claim term that I have not provided a definition, you should use its ordinary meaning within the context of the patent in which the claim term is used.

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4. INFRINGEMENT

4.1 INFRINGEMENT GENERALLY

~~F'real owns the Asserted Patents and asserts~~ Patent law provides that ~~Defendants~~ any person or business entity that directly infringe the claims of the Asserted Patents makes, uses, sells, or offers to sell, without the patent owner's permission, any product, apparatus, or method covered by making, using, selling, offering for sale, or importing into the at least one claim of a United States the Accused Products. ~~F'real also asserts that Defendants indirectly infringe the Asserted Patents based on other activities. I will instruct you on the requirements of direct and indirect infringement later.~~

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~~Patent law gives the~~ patent before the patent expires, infringes the patent. A patent owner of a valid patent the may enforce its right to exclude others from making, using, offering to sell, or selling, or importing the patented invention within the United States during the term of the patent. Any person or business entity that has engaged in any of

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~~those acts without the patent owner's permission infringes the patent.~~ by filing a lawsuit for patent infringement.

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In patent law, the requirements of a claim are often referred to as “claim elements” or “claim limitations.” When a product meets each and every requirement of a claim, the claim is said to “cover” that product, and that product is said to “fall within the scope” of that claim.

Infringement must be assessed on a claim-by-claim basis. Therefore, there may be infringement as to one claim but no infringement as to another.

A patent may be infringed directly or indirectly. As explained further in the following Instructions, direct infringement results if the accused product is covered by at least one claim of the patent and a Defendant has committed certain infringing acts. ~~See~~ This is explained further in Section 4.22. Indirect infringement results if a Defendant induces someone else to infringe a patent or contributes to someone else's infringement of a patent. ~~See~~ This is explained further in Section 4.23.

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Ownership and/or licensing of another patent is not a defense to patent infringement, nor is it a defense to patent infringement if the accused product meets the claims of a patent other than the one asserted here.

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A competitor's efforts to "design around" known patents is not prohibited by law. Rather, these efforts are encouraged because they generally promote innovation, a goal consistent with the policies of the U.S. patent system.¹

In order to prove infringement, Plaintiffs must do so by a preponderance of the evidence.

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4.2 DIRECT INFRINGEMENT

In regard to the ~~'377'~~ '377' patent, Plaintiffs allege that Hamilton Beach and Hershey Creamery directly infringed, literally or under the doctrine of equivalents, claims 1, 11, 18, 19, and 27 of the ~~'377'~~ '377' patent by making, using, selling, offering to sell, and importing into the United States the accused MIC2000 blender.

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In regard to the ~~'450'~~ '150' patent, Plaintiffs allege that Hamilton Beach directly infringed, ~~and continues to infringe,~~ literally or under the doctrine of

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¹ *TiVo Inc. v. EchoStar Corp.*, 646 F.3d 869, 883 (Fed. Cir. 2011) ("[L]egitimate design-around efforts should always be encouraged as a path to spur further innovation.") (citation omitted); *MeadWestvaco Corp. v. Rexam PLC*, 2012 WL 2153165, at *3 (E.D. Va. June 12, 2012) ("Thus, a competitor's ordinary design-around efforts are not prohibited by law. Rather, they generally promote innovation, a goal consistent with the policies of our patent system."); *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 762 F. Supp. 2d 710, 721 (D. Del. 2011) ("design around . . . which would have been legitimate competitive behavior"), vacated on other grounds, 711 F.3d 1348 (Fed. Cir. 2013); *Rehrig Pac. Co. v. Norseman Plastics Ltd. Inc.*, 2003 WL 25667625, at *29 (C.D. Cal. Sept. 30, 2003) ("[I]t is perfectly legitimate to design around a patent, and indeed one of the purposes of the patent disclosure system is to encourage this valuable form of competition."); *State Industries, Inc. v. A.O. Smith Corp.*, 75 F.2d 1226, 1335 (Fed. Cir. 1985) ("Conduct such as Smith's, involving keeping track of competitor's products and designing new and possibly better or cheaper functional equivalents is the stuff of which competition is made and is supposed to benefit the consumer.");

6.10 FACTORS FOR DETERMINING A REASONABLE ROYALTY

In determining the reasonable royalty, you should consider all of the facts known and available to the parties at the time that the infringement began. Some of the kinds of factors that you may consider in making your determination are:

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1. The royalties, if any, received by Plaintiffs for the licensing of the Asserted Patents, proving or tending to prove an established royalty.
2. The royalties, if any, Defendants paid to license other patents comparable to the Asserted Patents.
3. The nature and scope of the license, such as whether the license is exclusive or non-exclusive, or as restricted or nonrestricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results.
5. Whether Plaintiffs had an established policy and marketing program to enforce its patent rights or license its patent under special conditions to preserve its monopoly.
6. The portion of the realizable profits that should be credited to the invention as distinguished from non-patented elements, the

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manufacturing process, ~~or the~~ business risks, or significant features or improvements added by the infringer.

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7. The commercial relationship between Plaintiffs, on the one hand, and Defendants, on the other hand, such as whether they are competitors in the same line of business, or whether they are inventor and promoter.
8. The duration of the Asserted Patents and the term of the hypothetical license.
9. The established profitability of the product made under the patent, its commercial success, and its current popularity.
10. The nature of the patented invention; the character of any commercial ~~example of it~~ embodiment of it as owned and produced by Plaintiffs, and the benefits to those who have used the invention.
11. The extent to which ~~any party has~~ Defendants have made use of the invention and any evidence probative of the value of that use.
12. The effect of selling the patented product in promoting the sales of other products by Defendants; the existing value of the invention to Plaintiffs as a generator of sales of its own non-patented items; and the extent of such collateral sales.

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13. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
14. The opinion testimony of qualified experts.
15. The existence of any licenses that are technically and economically comparable to the license to be negotiated at the hypothetical negotiation.
16. The amount that a licensor (such as Plaintiffs) and a licensee (such as Defendants) would have agreed upon (at the time the infringement began) if both sides had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a patentee who was willing to grant a license.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty Defendants would have been willing to pay and Plaintiffs would have

been willing to accept, acting as normally prudent business people. The final factor establishes the framework which you should use in determining a reasonable royalty.

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6.11 REASONABLE ROYALTY: APPORTIONMENT

The reasonable royalty award must be based on the incremental value that the patented invention has contributed to the accused product. When the infringing product has both patented and unpatented features, measuring this value requires a determination of the value added by the patented features. The ultimate royalty must reflect the value attributable to the infringing features of the product, and no more.

7. DELIBERATIONS AND VERDICT

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7.1 INTRODUCTION

~~I have completed~~ That concludes the part of my instructions on the law. I will end by explaining some things about how you will conduct your deliberations in the jury room and about your possible verdicts.

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~~When~~ Once you start deliberating, do not talk to the jury officer, or to me, or to anyone ~~but~~ else except each other about the case. If you have any questions or messages, you must write them down on a piece of paper, sign them, and then give them to the jury officer. The officer will give them to me, and I will respond as soon as I can. I may have to talk to the lawyers about what you have asked, so it

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EXHIBIT B

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and
RICH PRODUCTS CORPORATION,
Plaintiffs,

C.A. No. 16-41 (GMS)

v.

CONSOLIDATED

HAMILTON BEACH BRANDS, INC, et al.,
Defendants.

Complete transcript of the
videotaped deposition of ERNEST B. PRYOR, JR., taken at
the instance of the Plaintiff, before Wanda T. Blanks, a
Court Reporter and Notary Public for the State of Virginia
at Large, on March 23, 2018, beginning at 9:31 a.m., at
the offices of Hilton Garden Inn, 4050 Cox Road, Glen
Allen, Virginia; said deposition taken pursuant to the
Federal Rules of Civil Procedure.

Job No. 2842286

Pages 1 - 103

Page 1

1 APPEARANCES:

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15
16 Counsel for Defendant Hershey Creamery Company:

17 BARLEY SNYDER, LLP

18 By: William C. Boak, Esq.

19 213 Market Street

20 12th Floor, Harrisburg, PA 17101

21
22 ALSO PRESENT:

23 Bevin Armistead, videographer

1 contribute anything here.

2 Q. To the IMI2000 you mean?

3 A. Not that I'm aware of.

4 Q. Did you work with a machine shop in any
5 way in connection with the IMI2000?

6 A. Yes.

7 Q. Which machine shop?

8 A. I don't know which one at the time. We
9 would have -- these would be welded assemblies, things
10 that have to be fabricated. Our own machine shop would
11 not have this internal capability, so we would have gone
12 locally outside to fabricate some stuff.

13 Q. Do you recall the machine shops you were
14 working with at this time? This was October 11, 2010
15 through August 2014.

16 A. Our process in Hamilton Beach is we would
17 submit concepts to be prototyped through our own machine
18 shop. They would outsource it. I wouldn't necessarily
19 have any idea where parts were coming from. Our engineers
20 would get the parts. We'd put the prototypes together,
21 evaluate them, make changes.

22 Q. Well, what parts on -- and by the way, for
23 Williams Exhibit 11, can we refer to that patent as the
24 Hamilton Beach '823 patent?

25 A. Can we refer to this document as the '823

1 patent? Sure.

2 Q. Okay. So for your -- in this -- your '823
3 patent relates to the module you were building for Cornelius,
4 the IMI2000, right?

5 MR. FOSTER: Objection to the extent
6 it mischaracterizes the witness' prior testimony.

7 A. Can you say the question again, please?

8 NOTE: The requested material is read
9 back by the court reporter, and the deposition continues as
10 follows:

11 A. Yes.

12 Q. So what parts of this IMI2000 module would
13 Hamilton Beach have sent out to machine shops?

14 A. To weld machine shafts that we might have
15 needed. We might have even -- machine shop. I will just
16 say we might have outsourced components in order for us to
17 be able to build this prototype. Sometimes it's rapid
18 prototyping. Seals, plastic parts, metal parts, welding
19 parts.

20 Q. Does it take the machine shop a lot of work
21 to make those type of parts?

22 MR. FOSTER: Objection. Vague.

23 A. In my opinion, yes, it's a lot of work.

24 Q. Well, why?

25 A. It's a complicated machine.

1 Q. So on your '823 patent, what are the types of
2 parts Hamilton Beach would have sent out to the machine shop
3 to make?

4 MR. FOSTER: Objection. Asked and
5 answered. Lack of foundation.

6 A. Yeah, I think my original answer is the same.

7 Q. Well, you have plastic parts on the splash
8 shield. You have, what, a rubber cup holder here. You have
9 sheeting, electronics. Are those the type of things that
10 might have been sent out to a machine shop for your IMI2000
11 module of your '823 patent?

12 MR. FOSTER: Objection. Foundation.

13 A. We would have chosen appropriate vendors to
14 help us fabricate the prototypes. If the machine shop -- we
15 wouldn't go to a machine shop to make electronics. We might
16 go to the machine shop to help us machine material.

17 Q. All right. Let's be specific. What sort of
18 materials are we talking about on like what's shown in your '823
19 patent?

20 MR. FOSTER: Objection. Vague and
21 lack of foundation. It's a patent, not a prototype.

22 A. Can you repeat the question?

23 NOTE: The requested material is read
24 back by the court reporter, and the deposition continues as
25 follows:

1 Q. Or what parts? You've got a whole bunch of
2 parts identified here. Which one of those would you have sent
3 out to machine shops?

4 MR. FOSTER: Objection. Vague. Asked
5 and answered.

6 A. In the picture that I think you're referring
7 to, the weldments that the large sheet metal components that
8 would be laser cut and welded together, we would have built
9 that outside partnered with a machine shop.

10 Q. What about element 53 here, the shield? Is
11 that something that would likely have gone to a machine shop
12 to do the molds for it?

13 MR. FOSTER: Objection. Vague. Calls
14 for speculation.

15 A. Yeah, I don't remember exactly how we would
16 have made that part at the time.

17 Q. Was that the type of thing that would be
18 typically sent out to do plastic molds?

19 MR. FOSTER: Same objection.

20 A. It depends on the time frame of the question.
21 We would be rapid prototyping something early in the process.
22 We probably would not be building molds.

23 Q. Okay. Why don't you explain what you mean by
24 rapid prototype?

25 A. It's a process where we can print -- it's a

1 printing process to rapidly prototype a plastic component.

2 It may not be the exact material, but it's a common practice
3 in the industry to make a prototype plastic part.

4 Q. 3-D printing?

5 A. 3-D printing, sure.

6 Q. And does that require a fair amount of work
7 to do the rapid prototype through 3-D printing?

8 MR. FOSTER: Objection. Vague.

9 A. I don't know how much work it takes. I'm
10 familiar with the process. Takes a lot of money.

11 Q. And then after the -- and then do you name as
12 coinventors the people at the machine shop who are working on
13 the 3-D printing rapid prototype?

14 MR. FOSTER: Objection. Lack of
15 foundation.

16 A. These are two separate things. The 3-D
17 printing and the machine shop are different partners to
18 Hamilton Beach. If we approach a 3-D printer, they're
19 typically not a machine shop.

20 Q. Okay. Would that be a design firm then?

21 A. I would just call them a 3-D printer firm,
22 not a design firm.

23 Q. Okay, 3-D printer firm. So, would the 3-D
24 printer firm be named as a coinventor?

25 A. No. They're printing a part that we

1 making prototypes, aren't there?

2 MR. FOSTER: Objection. Foundation.

3 A. I don't understand your question, several
4 stages of making prototypes.

5 Q. Well, in -- so let's take the IMI2000 of your
6 '823 patent. What's your recollection of the stages that you
7 went through to build that and prototype it?

8 MR. FOSTER: Objection. Assumes facts
9 not in evidence.

10 A. Our new product development process, customers
11 present us with the problem. Our engineering teams get
12 together, develop conceptual solutions. Engineers on the
13 team are going to design components or conceive those
14 solutions in 3-D CAD. Depending on -- we'll go through
15 design reviews where engineering management and other
16 engineers may be brought in to review the concepts, critique
17 the concepts, make the concepts better if we can. We'll
18 agree that that's a good approach, go forward with a
19 prototype for evaluation depending on -- we do what we can
20 inhouse and we'll outsource components that we either cannot
21 make or don't have the capacity to make inhouse. We'll
22 bring all of those components together, build the prototype,
23 evaluate the prototype, repeat.

24 Q. And are partial prototypes ever made to
25 simulate a certain aspect of the structure before a full

1 complete production type prototype is made?

2 MR. FOSTER: Objection to form. Vague.

3 A. Yes.

4 Q. Can you explain?

5 A. We wouldn't prototype the whole -- if there
6 was a particular component that we could prototype and
7 evaluate before completing an entire assembly, we are always
8 interested in finding the problems early. So we would
9 prototype components or subassemblies in advance of a
10 complete product if there was an opportunity to do so and we
11 have reason to do so.

12 Q. So on your '823 patent for the IMI2000, how
13 did you decide who should be the named inventors on this?

14 MR. FOSTER: Objection. Foundation.
15 Assumes facts not in evidence. You can answer.

16 A. I'm not exactly sure how Hamilton Beach
17 decides, but anyone that we believe contributed significantly
18 to the patent we would include.

19 Q. Well, the people who machine the parts,
20 aren't they contributing to building it?

21 A. Contributing to building it. Not to the
22 conceptual design of the solution.

23 Q. Okay. So simply contributing to building the
24 product like the IMI2000 of your '823 patent doesn't make you a
25 proper inventor. That's your understanding?

1 MR. FOSTER: Objection to the extent
2 it calls for a legal conclusion. You can answer.

3 A. That's my understanding.

4 Q. So to be a proper inventor in your understanding
5 such as with your '823 patent, you'd need to have contributed
6 to the concept set forth in the claims of the patent, right?

7 MR. FOSTER: Objection to form. Vague.
8 Calls for legal conclusion.

9 A. Yes, I think you should have contributed to
10 something in the claim to be an inventor.

11 Q. All right. We'll let's take the claims of your
12 patent, your '823 patent. Why don't we start with claim 1,
13 and let me read it into the record.

14 An automated mix in-cup apparatus for mixing
15 consumable material, the apparatus comprising: a frame
16 supporting a reciprocating carriage, the carriage supporting
17 a mixing motor and a splash shield above a cup-receiving
18 position, the splash shield comprising at least one sidewall
19 and closed lid and an open bottom end; a rotatable mixing
20 blade extending from the mixing motor for mixing a consumable
21 material, the motor operable to rotate the mixing blade, a
22 drain proximate the cup-receiving position, and the movement
23 of the mixing blade automatically effected to enter and exit
24 a cup selectively placed in the cup-receiving position and the
25 movement of the splash shield automatically effected to

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1 contact the frame, the contact between the splash shield
2 and the frame defining an enclosed space, the enclosed
3 space comprising the cup-receiving position.

4 Do you see that?

5 A. Yes, sir.

6 Q. Now, let me get your understanding, but
7 I'll start with my understanding. My understanding is what
8 is being claimed here as the invention is having a mixing
9 assembly with a splash shield that moves downward on top
10 of the cup, does the mixing and then moves back upward.

11 Is that your understanding of what this
12 patent is about?

13 MR. FOSTER: Objection. Foundation.
14 Calls for a legal conclusion.

15 A. Yes, I share that understanding.

16 Q. So with that shared understanding, what did you
17 contribute to that concept?

18 A. So in Hamilton Beach for my time there, I was
19 hired as the senior project engineer to work on blenders,
20 and in all my time there I have been overseeing new product
21 development associated with blenders as well as other
22 motorized categories.

23 So it would not be uncommon to include me in
24 any discussions for motorized products and solutions to
25 create blended products. So my contributions would have

1 been in the general conceptual area of how to size the
2 motor, how to select the blade, how to move the motor up
3 and down, how to cool the motor. There would have been a
4 lot of mechanical challenges here that would have relied
5 on my experience and input.

6 Q. But sizing the motor and cooling it aren't
7 part of the claims of your '823 patent, are they?

8 A. I have to read the rest of the claim.

9 Q. Yes, please do.

10 A. I don't see where the motor is sized or
11 cooled in there, no.

12 Q. Okay. So that wouldn't make you a coinventor
13 of your '823 patent to be suggesting a motor of a particular
14 size, right?

15 A. I guess not.

16 MR. FOSTER: Objection to the extent
17 it calls for a legal conclusion.

18 Q. Okay. So what do you recall of what you
19 contributed, Ben Branson contributed and Brian Williams
20 contributed to the concepts claimed in your '823 patent?

21 A. It's still general in nature. Conceiving --
22 the things that we would claim here would have been nonexistent
23 before the customer came to us and asked us to blend in a cup.
24 We would have conceived the way of mounting a motor and
25 having it move up and down. Normally our motors are

1 stationary.

2 We would have conceived the ways to interlock
3 things. It's common on our commercial products to have to
4 protect consumers from moving parts.

5 We would have conceived how to position
6 the motors and blades during different stages of the blending
7 and cleaning process. These would have all been new items
8 that we were having to solve for us.

9 Q. And to your recollection, did the three of you,
10 yourself, Williams and Branson, conceive the idea in the
11 claims of the '823 patent in one of these team meetings?

12 MR. FOSTER: Objection. Vague.
13 Foundation.

14 A. I don't know exactly when or how they would
15 have been conceived. We would have been meeting regularly,
16 making prototypes, evaluating them, making changes.

17 Q. So let's assume that you, Mr. Williams and
18 Mr. Branson conceived what's set forth in the claims of the
19 '823 patent. Now, if you had asked someone else to do a CAD
20 drawing of the splash shield, in your eyes would they
21 properly be named as a coinventor?

22 MR. FOSTER: Objection. Calls for
23 speculation and a legal conclusion. You may answer.

24 A. If they create exactly what we asked, no.
25 If they contribute something else to solving the problem or

1 conceive something new to contribute, yes.

2 Q. Well, if you told them I want a splash shield
3 cylindrical and they make a CAD drawing of that, do you
4 consider them an inventor?

5 MR. FOSTER: Objection. Asked and
6 answered. Same objection.

7 A. No.

8 Q. All right. Well, let's take for instance
9 element 50 in figure 2 of your '823 patent.

10 A. Figure 2, okay.

11 Q. Yeah. That's the splash shield, right,
12 element 50?

13 MR. FOSTER: Objection. Assumes facts
14 not in evidence.

15 A. I would call that the splash shield, yes, clear
16 splash shield.

17 Q. So if you told somebody to make a CAD drawing
18 of that splash shield, would you consider them a coinventor
19 because they made the CAD drawing?

20 A. No.

21 Q. And let's say then you wanted to rapid
22 prototype that splash shield and you gave that to somebody
23 inhouse who was doing 3-D printing, would you consider the 3-D
24 printer inhouse to be a coinventor?

25 A. No.

1 Q. And let's say you wanted to make that splash
2 shield at a machine shop and you gave the machine shop a CAD
3 drawing and said make that splash shield for me, would the
4 machine shop be a coinventor?

5 A. No.

6 Q. And let's take the blade here in figure 3.
7 If you told someone to make a CAD drawing of that blade,
8 would they be a coinventor?

9 MR. FOSTER: Objection. Foundation.
10 Is the blade claimed?

11 A. I'm not sure what blade we're talking about in
12 figure 3.

13 Q. Element 20.

14 A. Okay. What's the question again, please?

15 Q. And you said look, I want a blade prototyped
16 for my IMI2000 module, would you consider them an inventor
17 of your '823 patent?

18 MR. FOSTER: Objection. Vague.

19 A. Prototyping the blade?

20 Q. Yes.

21 A. No.

22 Q. Right. This patent is not about the blade,
23 is it?

24 A. I think it does include a blade.

25 Q. Right, but the blade here is not the core of

1 the invention, is it?

2 MR. FOSTER: Objection. Vague.

3 A. I'm not sure of your meaning of the core of
4 the invention.

5 Q. Okay. Well, let me try to simplify it then.
6 But prototyping the blade 20 in your '823 patent, you
7 wouldn't consider that a coinventor, right?

8 MR. FOSTER: Objection. To the
9 extent it calls for legal conclusion.

10 A. The act of prototyping the blade, no.

11 MR. CHAMBERS: Why don't we go
12 ahead and take a break?

13 MR. FOSTER: Before we go off
14 the record, just I want to designate the transcript highly
15 confidential. We've been discussing a couple highly
16 confidential exhibits of Hamilton Beach pursuant to
17 protective order.

18 NOTE: A break was taken from
19 10:51 a.m. until 11:01 a.m., after which the deposition
20 continues as follows:

21 BY MR. CHAMBERS:

22 Q. Mr. Pryor, let's try to finish with your '823
23 patent of Williams Deposition Exhibit 11. Let me direct your
24 attention to figure 6. Now, element 23 in figure 6, that's a
25 spring, right?

1 A. Yes.

2 Q. Now, there could be a lot of work in picking
3 the right spring, the right length, the right tension, the right
4 materials, correct?

5 MR. FOSTER: Objection. Foundation.
6 Vague.

7 A. Yes.

8 Q. And would you consider the work involved in
9 picking the right spring to be an inventor of your '823 patent?

10 MR. FOSTER: Objection to the extent
11 it calls for legal conclusion.

12 A. I consider the concept of that mechanism
13 inclusive of the spring to be inventible. The sizing of the
14 spring and the selection of the materials, no.

15 Q. So the person working on the sizing of the
16 spring and the materials and the length would not be an
17 inventor of your '823 patent, right?

18 MR. FOSTER: Objection to the extent
19 it mischaracterizes the witness' prior testimony.

20 A. In this case, I know who helped conceive the
21 mechanism, so he also probably sized the spring and selected
22 the material too. So it could be an inventor, yes.

23 Q. But the work he did on the spring didn't make
24 him inventor, right?

25 MR. FOSTER: Objection. Asked and

1 answered.

2 A. I hope to repeat. The work he may have done
3 conceiving of the mechanism and putting a spring in that
4 place so that the mechanism would work I think is inventible.
5 The work that would continue into sizing the spring, selecting
6 the number of coils, how to -- what material to select,
7 that's general spring design, not --

8 Q. Which is not part of the inventorship?

9 A. I don't think we're inventing a spring, no.

10 Q. And you would also say that doing the CAD
11 drawing for the spring, that doesn't make you an inventor,
12 right?

13 A. No.

14 MR. FOSTER: Objection. Foundation.

15 Q. And machining the spring doesn't make you an
16 inventor?

17 A. No.

18 Q. And let's turn to figure 11 of your '823 patent.
19 We have a manifold, element 36, right?

20 A. Yes.

21 Q. Now doing the CAD drawing for that manifold
22 doesn't make you an inventor of the '823 patent, right?

23 A. No.

24 Q. And prototyping the manifold of your '823 patent
25 doesn't make you a coinventor of your '823 patent?

1 A. No.

2 MR. FOSTER: Objection. Vague.

3 Q. Now, once you, Mr. Williams and Mr. Branson
4 had conceived the concept of the reciprocating blender
5 assembly claimed and let me stop there. Can I in a very
6 general way describe your claimed concept in your '823
7 patent as a reciprocating blender assembly?

8 A. Yes.

9 Q. So once you, Mr. Williams and Mr. Branson had
10 conceived the claimed concept of the reciprocating blender
11 assembly for your '823 patent, there would probably be
12 hundreds of hours of engineering detail work required to
13 get that ready for production, right?

14 MR. FOSTER: Objection. Assumes facts
15 not in evidence and calls for a legal conclusion. You may
16 answer.

17 A. Can you repeat the question?

18 NOTE: The requested material is read
19 back by the court reporter, and the deposition continues as
20 follows:

21 A. Yes.

22 Q. And that engineering work could have cost tens
23 if not hundreds of thousands of dollars in resources, right?

24 A. Yes.

25 Q. And how many people would you say would be

1 involved in this process of getting your invention ready
2 for production besides yourself, Mr. Branson and Mr. Williams?

3 A. How many people?

4 Q. (Nods head).

5 A. Getting it ready for production?

6 Q. Right.

7 A. Can you clarify that question a little more?

8 We have a whole company of people that are participating in
9 some way in the project. We have a factory of people that are
10 going to make it and a lot of people are involved in this project.

11 Q. So there could be like dozens if not --

12 A. Yes.

13 Q. -- maybe even hundreds of people involved?

14 A. I don't know if I would go to hundreds, but
15 dozens.

16 Q. Dozens of people.

17 A. We don't have hundreds of people in Hamilton
18 Beach.

19 Q. So, but in your view, all these other dozens
20 of people who were involved in getting the invention, you, Mr.
21 Williams and Mr. Branson, made ready for production doesn't
22 necessarily make them or doesn't make them coinventors
23 of your invention, right?

24 A. Right.

25 Q. Now, let's look at the IMI2000 module that's

1 added this weight.

2 BY MR. CHAMBERS:

3 Q. There's no guide rod weight shown in your '823
4 patent, is there?

5 A. May I clarify the question for my understanding?

6 Q. Sure.

7 A. I consider the entire assembly a weighted
8 assembly. This is just more weight added to it, and I'm
9 not sure when we added that weight. It very well could
10 exist in today's assembly. This patent has some images
11 that I don't know how current they are.

12 Q. Well, the question before you right now
13 is actually a pretty simple question. There's no guide
14 rod weight such as that shown on Williams Deposition Exhibit
15 13 shown in your '823 patent of Williams Exhibit 11, right?

16 MR. FOSTER: Objection. Foundation.
17 Argumentative. You can answer the question.

18 A. I don't think I see it in this patent.

19 Q. And your '823 patent of Williams Exhibit 11 was
20 filed October 11, 2010, right?

21 A. Yes.

22 Q. Does that refresh your recollection about
23 whether the guide rod weight of Williams Deposition Exhibit
24 13 came about sometime after October 11, 2010?

25 A. No.

1 COMMONWEALTH OF VIRGINIA,
2 COUNTY OF HANOVER, to-wit:

3
4 I, Wanda T. Blanks, a Notary
5 Public for the Commonwealth of Virginia at Large, do
6 hereby certify that the foregoing deposition of
7 Ernest B. Pryor, Jr., was duly taken and sworn to before
8 me at the time and place set out in the caption hereto.

9 Further, that the transcript
10 is, to the best of my ability, a true and correct record
11 of the proceedings, and that there was one exhibit.
12 marked by me during the taking hereof.

13 Given under my hand this 6th
14 day of April 2018.

15
16
17
18
19
20
21
22 _____
23 WANDA T. BLANKS

24 Notary Registration No. 277067

25 My Commission expires: August 31, 2019

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EXHIBIT C

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)
RICH PRODUCTS CORPORATION,)
Plaintiffs,)
-vs-) C.A. No. 16-41 (GMS)
CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)
HERSHEY CREAMERY COMPANY and)
PAUL MILLS d/b/a MILLS BROTHERS)
MARKETS,)
Defendants.)

HIGHLY CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER
VIDEOTAPED DEPOSITION OF BRIAN P. WILLIAMS
8:56 a.m. to 6:04 p.m.
December 13, 2017
Glen Allen, Virginia

REPORTED BY:
Rhonda D. Tuck, RPR, CRR
Job No. 2761269
Pages 1 - 226

1 Videotaped deposition of BRIAN P.
2 WILLIAMS, taken and transcribed on behalf of the
3 Plaintiffs, by and before Rhonda D. Tuck, RPR, CRR,
4 Notary Public in and for the Commonwealth of
5 Virginia at large, pursuant to Rule 30 of the
6 Federal Rules of Civil Procedure, and by Notice to
7 Take Depositions; commencing at 8:56 a.m.,
8 December 13, 2017, at Hilton Garden Inn, 4050 Cox
9 Road, Glen Allen, Virginia.

10
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19 BY: GUY W. CHAMBERS, ESQUIRE
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17 (202) 842-8800

18 william.foster@dbr.com

19 BY: WILLIAM S. FOSTER, JR., ESQUIRE

20
21 ALSO PRESENT:

22 Scott Pinzone, Hamilton Beach

23 Ray Graham - Videographer

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 A. Those must be the pictures of the -- I 01:31
2 didn't prepare this, but my understanding would be 01:31
3 that these are the pictures of what he's 01:31
4 referencing. 01:32
5 Q. Let me direct your attention now to 01:32
6 Williams Deposition Exhibit 11, which is U.S. Patent 01:32
7 Number 8,807,823, and ask you if you recognize that 01:32
8 document? 01:32
9 A. I recognize this as the same one that we 01:32
10 -- yes, this is a Hamilton Beach document. Hamilton 01:32
11 Beach patent. 01:32
12 Q. Okay. Do you recognize Exhibit 11? 01:32
13 A. Yes. It has my name on it. 01:33
14 Q. So what is Exhibit 11? 01:33
15 A. It is a U.S. Patent for an "Automated 01:33
16 Mix-In-Cup Apparatus and the Method of Operating the 01:33
17 Same." 01:33
18 Q. Are you the Brian P. Williams listed as 01:33
19 the lead inventor? 01:33
20 A. Yes. 01:33
21 Q. And did you review the application for 01:33
22 this patent before it was filed? 01:33
23 A. Yes. 01:33
24 Q. Does the blender and blender operation 01:33
25 described in the specification of U.S. Patent Number 01:34

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 8,807,823, Williams Exhibit 11, correspond to the 01:34
2 MIC2000 and BIC2000? 01:34
3 MR. FOSTER: Objection. Vague. 01:34
4 THE WITNESS: This appears to only refer 01:34
5 to the IMI2000. 01:34
6 BY MR. CHAMBERS: 01:34
7 Q. To facilitate questioning, can we refer 01:35
8 to Exhibit 11 as the Hamilton Beach '723 Patent? 01:35
9 A. Yes. 01:35
10 Q. What's the difference between what's 01:35
11 described in the specification of the Hamilton Beach 01:35
12 '723 Patent and the MIC2000? 01:35
13 A. I would have to read the entire patent to 01:36
14 be certain that it only refers to the IMI2000, but 01:36
15 you're asking what the differences are between the 01:36
16 IMI2000 and the MIC2000? 01:36
17 Q. Yes. I'm trying to get a sense of 01:36
18 whether what's described in the patent corresponds 01:36
19 at least in part to the MIC2000 and BIC2000 01:36
20 blenders. 01:36
21 MR. FOSTER: Is there a question to 01:36
22 answer? 01:36
23 MR. CHAMBERS: Well, I'm just clarifying 01:36
24 it for the witness. 01:36
25 THE WITNESS: I think I've been clear 01:36

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HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 previously that the IMI2000 is a module and the 01:36
2 BIC2000 and MIC2000s are finished products. 01:37
3 BY MR. CHAMBERS: 01:37
4 Q. Well, maybe this will be an easier way of 01:37
5 addressing it. Why don't we refer to the '723 01:37
6 Patent and the MIC and BIC operation manual of 01:37
7 Exhibit 10. So the blender or module shown in 01:37
8 Figure 2 of the '723 Patent doesn't have the control 01:37
9 panel and the housing and the door assembly shown in 01:38
10 the MIC2000 and BIC2000 operation manual, right? 01:38
11 A. It does not have the control panel. It 01:38
12 does not have the enclosure, what you're calling the 01:38
13 housing, and it does not have this door, door 01:38
14 assembly. 01:38
15 Q. Now, is that the primary difference 01:38
16 between what's shown in the '723 Patent and the MIC 01:38
17 and BIC2000s? 01:38
18 MR. FOSTER: Objection. Vague. 01:38
19 THE WITNESS: Those three items are the 01:38
20 main difference between the BIC2000, the MIC2000 01:38
21 and the IMI2000. 01:39
22 BY MR. CHAMBERS: 01:39
23 Q. All right. And also the main difference 01:39
24 between the MIC2000, BIC2000 and what's shown and 01:39
25 described in the specification of the '723 Patent, 01:39

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HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1	right?	01:39
2	MR. FOSTER: Objection. Foundation.	01:39
3	Form.	01:39
4	THE WITNESS: I'd have to read the entire	01:39
5	patent to make sure nothing else is described.	01:39
6	BY MR. CHAMBERS:	01:39
7	Q. Well, at this point I'm just asking for	01:39
8	the main differences. I'm sure there might be some	01:39
9	programming in the microprocessor, for example.	01:39
10	MR. FOSTER: Objection. Vague.	01:39
11	BY MR. CHAMBERS:	01:40
12	Q. Just, for instance, what's shown in	01:40
13	Figures 2 and 3 of the '723 Patent, is that	01:40
14	representative of portions of the MIC2000 and	01:40
15	BIC2000?	01:40
16	A. Portions -- these do represent portions	01:40
17	of what you may find inside of a MIC2000 and	01:40
18	BIC2000.	01:40
19	Q. And would you have the same answer about	01:40
20	portions of what's inside the MIC2000 and BIC2000	01:40
21	with respect to the remaining figures of the '723	01:41
22	Patent?	01:41
23	MR. FOSTER: Objection. Vague.	01:41
24	THE WITNESS: So what's your specific	01:41
25	question?	01:41

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 BY MR. CHAMBERS: 01:41

2 Q. The figures in the '723 Patent, Figures 2 01:41

3 -- let's exclude Figure 1 for now. Figures 2 01:41

4 through 15, do those illustrate generally what one 01:41

5 would find inside a MIC2000 or BIC2000? 01:41

6 A. Figure 3, yes. Figure 3A, no. Figure 4, 01:41

7 yes. Figure 5, yes. 5A, yes. Figure 6, yes. 01:42

8 Figure 6, yes. Figure 8, yes. Figure 9, yes. 01:42

9 Figure 10, yes. Figure 11, yes. Figure 12, yes, it 01:42

10 shows a BIC2000 cup holder. Figure 13, yes, the 01:42

11 same cup holder. The same for Figure 14 and for 01:43

12 Figure 15. They're all the same picture with just 01:43

13 different views. 01:43

14 Q. So Figure 12, for example, was the 01:43

15 IMI2000 cup holder, the one that's shown in 01:43

16 Figure 12? 01:43

17 A. That is the IMI2000 cup holder. 01:43

18 Q. Then that also appeared in the BIC2000? 01:43

19 A. Correct. 01:43

20 Q. Now, referring to Figure 10 of the '723 01:43

21 Patent, that shows fluid nozzles 37, as Element 37, 01:43

22 right? 01:44

23 A. Correct. 01:44

24 Q. Okay. And those fluid nozzles are 01:44

25 pointing upward, toward the top of the shield? 01:44

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1 COMMONWEALTH OF VIRGINIA AT LARGE, to wit:

2
3 I, Rhonda D. Tuck, RPR, CRR, Notary Public in and
4 for the Commonwealth of Virginia at Large, and whose
5 commission expires on May 31, 2020, do certify that the
6 aforementioned appeared before me, was sworn by me, and
7 was thereupon examined by counsel; and that the foregoing
8 is a true, correct, and full transcript of the testimony
9 adduced.

10 I further certify that I am neither related to nor
11 associated with any counsel or party to this proceeding,
12 nor otherwise interested in the event thereof.

13 Given under my hand and notarial seal at
14 Charlottesville, Virginia, this 29th day of December,
15 2017.

16
17
18
19
20
21
22
23 _____
24 Rhonda D. Tuck, RPR, CRR

25 Notary Public Registration No. 224847

Commonwealth of Virginia at Large

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' REPLY IN SUPPORT OF MOTION IN LIMINE NO. 2
TO EXCLUDE REFERENCE TO DEFENDANTS' PATENTS**

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Attorneys for Plaintiff

April 8, 2019

Although Defendants concede that their own patents are no defense to their infringement of f'real's patents, Defendants do not dispute that there is "a common misconception by the public that a patent grants an affirmative right to make the patented article." (Pl. Mtn. 2 at 2). Plainly, introduction into evidence of an alleged "patent for" the accused blenders can cause jury confusion and prejudice on the central issue of infringement. Fed.R.Evid. 403. As discussed in Plaintiffs' motion, it is for this reason that courts routinely preclude evidence of an accused infringer's own patents, unless used for a specific admissible purpose (*e.g.*, as prior art). Defendants do not cite a single case from Delaware or the Federal Circuit that says otherwise.

Significantly, Defendants do not dispute that their proposed arguments could be made with other technical documents, such as CAD drawings, technical manuals, physical exhibits, videos etc., that do not carry the potential risk of confusion and prejudice associated with Defendants' patent(s) (*see* Pl. Mtn. 2 at 3). Contrary to Defendants' assertion, Plaintiffs will *not* be relying on any of Defendants' patents to prove infringement at trial. Moreover, Defendants' use of other technical documents for their technical, copying, and damages arguments avoids a highly confusing, time consuming, misleading, and prejudicial sideshow of trying to connect Defendants' patents to the accused products.¹

Where there is ample alternative evidence that can be admitted for the purposes Defendants discuss, there is no reason to allow evidence that risks misleading or confusing the jury and is prejudicial to Plaintiffs. Those risks far outweigh any probative value of Defendants' patent, and cannot be fully cured by a limiting instruction.

¹ For example, Defendants would have to demonstrate that each of the accused products is actually covered by the '823 patent, that all versions of the accused products match the description and figures in the '823 patent, and that there are no differences between the '823 patent and the accused products. Plaintiffs' would then need to rebut this evidence as appropriate. This would be an unnecessary waste of trial time.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/ Michael J. Flynn

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April 8, 2019

PRETRIAL ORDER EXHIBIT 15

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

PLAINTIFFS' MOTION IN LIMINE NO. 3
TO EXCLUDE UNTIMELY INVALIDITY AND NON-INFRINGEMENT DEFENSES

OF COUNSEL:

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March 26, 2019

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Attorneys for Plaintiff

Plaintiffs respectfully move to preclude Defendants from introducing evidence at trial in support of Defendants' new, untimely invalidity and non-infringement defenses raised for the first time on summary judgment and/or in rebuttal expert reports, including: (1) Defendants' new "on sale" defense to f'real's '662, '658 and '150 patents; (2) Defendants' new argument that f'real must provide visual evidence of grinding/shaving for f'real's '377 patent; (3) Defendants' new argument that its accused blenders do not have an "unrestrained" splash shield or "sufficient mass" within the meaning of the '658 patent; (4) Defendants' new "divided infringement" argument and (5) Defendants' new doctrine of equivalents arguments.

On January 22, 2015, f'real served its first set of interrogatories on Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach"). Interrogatory No. 7 requested that Hamilton Beach state the factual basis for Hamilton Beach's non-infringement defenses and Interrogatory No. 8 asked Hamilton Beach to state the factual basis for its statutory invalidity defenses (Ex. A).

For Interrogatory No. 7, Hamilton Beach made boilerplate objections and then pledged that it "will supplement its response after Plaintiff provides its infringement contentions in accordance with the scheduling order in this case" (Ex. A, p. 14). Yet, in its "First Supplemental Response" after f'real provided its infringement contentions, Hamilton Beach stated vaguely that "the Accused Product does not include each and every limitation of any one asserted claim of the Patents-in-Suit" and pointed to a pile of technical documents from which more specific non-infringement contentions could supposedly be divined (Ex. A, pp. 14-15).

For Interrogatory No. 8, Hamilton Beach initially provided boilerplate objections, and later supplemented its response on January 5, 2016, by "incorporating by reference its Invalidity Contentions served on May 22, 2015" (Ex. A, pp. 14-15). But, there is no mention in those contentions of any "on sale" defense (Ex. B, p. 11).

Hamilton Beach never supplemented its responses to Interrogatory Nos. 7 or 8 after its January 5, 2016 first supplemental responses, despite the fact that discovery did not close for another two and half years, in July 2018. *See* Ex. C; D.I. 109.

Federal Rule of Civil Procedure 26(e)(1)(A) requires that:

A party who has made a disclosure under Rule 26(a) – or who has responded to an interrogatory, request for production, or request for admission – must supplement or correct its disclosure or response: (A) in a timely manner if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing.

The rule “prohibits parties who are aware of their deficient response from ‘hold[ing] back material items and disclos[ing] them at the last moment.’” *Woods v. De Angelo Marine Exhaust, Inc.*, 692 F.3d 1272, 1282 (Fed. Cir. 2012). Contention interrogatories “serve an important purpose in helping to discover facts supporting the theories of the parties.” *Woods*, 692 F.3d at 1280. “Rule 26(e) ‘is designed to prevent a party from surprising his adversary by setting forth new facts . . . not disclosed during the discovery process.’” *INVISTA North America S.a.r.l. v. M & G USA Corp.*, 2013 WL 3216109, *5 (D. Del. June 25, 2013) (citation omitted).

“[D]istrict courts have discretion to exclude evidence when a party acts in bad faith or prejudices its adversary by deliberately delaying, or wholly failing, to respond to contention interrogatories.” *Woods*, 692 F.3d at 1280. Federal Rule of Civil Procedure 37(c)(1) states, in pertinent part, that “[i]f a party fails to provide information . . . as required by Rule 26 (a) or (e), the party is not allowed to use that information . . . to supply evidence on a motion, at a hearing, or at trial, unless the failure was substantially justified or is harmless.” Courts in this district routinely preclude late-filed contentions from use at trial on this basis. *See, e.g., Praxair, Inc. v. ATMI, Inc.*, 445 F. Supp. 2d 460, 469-70 (D. Del. 2006); *Vehicle IP, LLC v. Werner Enters., Inc.*, No. 10-503-SLR, D.I. 209 (D. Del. Sept. 20, 2013) (excluding non-infringement defenses not

raised in response to plaintiff's infringement contentions) (attached as Ex. D). "The cardinal governing principle of case management . . . is that only issues that have been properly vetted through discovery are considered by the court and/or presented to the jury." *Carrier Corp. v. Goodman Glob., Inc.*, 64 F. Supp. 3d 602, 613 (D. Del. 2014).

Plainly, Defendants failed to identify their new "on sale" invalidity defense in response to Plaintiffs' interrogatories, or otherwise timely disclose it. Defendants concocted their new "on sale" defense late in the case after it was unequivocally proven that Defendants' "public use" allegation never happened (*see* D.I. 169, pp. 37-40). The first disclosure of Defendants' new "on sale" defense appeared in their January 11, 2019 summary judgment answering brief (*see* D.I. 195, pp. 27-32).¹ The untimeliness of Defendants' new "on sale" defense prejudiced f'real by preventing investigation of the alleged "on sale" activities prior to the close of fact discovery.

f'real has also been prejudiced by Defendants' failure to disclose their non-infringement contentions in a timely manner. Because of this, f'real had to guess at what those non-infringement defenses might be when f'real prepared its opening expert report on August 23, 2018. By hiding their non-infringement contentions, Defendants were able to surprise f'real with new non-infringement arguments in Defendants' rebuttal expert report (to which no reply report was permitted) and on summary judgment. When f'real rebutted those new non-infringement arguments in f'real's summary judgment answering briefs, Defendants argued that f'real was too late. Plainly, Defendants should either be required to give f'real fair notice on their non-infringement contentions in response to f'real's interrogatories or be willing to give f'real a fair opportunity to rebut to Defendants' belated contentions.

¹ Prior to summary judgment, Defendants' only disclosure of any "on sale" theory was a single vague mention in their Final Invalidity Contentions, citing to its Counterclaims and identifying a completely different alleged offeree than Defendants now contend. *See* Ex. E at 13.

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EXHIBIT A

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,)	
)	
Plaintiff,)	
	)	C.A. No. 14-1270-GMS
v.)	
	)	JURY TRIAL DEMANDED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and	)	CONTAINS HIGHLY
PAUL MILLS d/b/a MILLS BROTHERS	)	CONFIDENTIAL INFORMATION
MARKETS,	)	SUBJECT TO PROTECTIVE ORDER
)	
Defendants.)	

**DEFENDANT HAMILTON BEACH BRANDS, INC.'S FIRST SUPPLEMENTAL
RESPONSES TO PLAINTIFF'S F'REAL FOODS, LLC'S FIRST SET OF
INTERROGATORIES TO HAMILTON BEACH BRANDS, INC.**

Pursuant to Federal Rules of Civil Procedure 26 and 33 and the Local Rules of this Court, Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach"), by and through its undersigned counsel, provides the following supplemental answers and objections to Plaintiff f'real Foods, LLC's ("f'real" or "Plaintiff") First Set of Interrogatories to Hamilton Beach.

These responses are based on information reasonably available to Hamilton Beach at this time. Discovery in this case is ongoing, and thus, Hamilton Beach reserves the right to supplement, correct, or amend these responses as appropriate.

GENERAL OBJECTIONS

Hamilton Beach expressly incorporates into each of the following supplemental answers all General Objections raised by Hamilton Beach's initial response to Plaintiff's First Set of Interrogatories to Hamilton Beach, whether or not a supplemental answer refers to any General Objection.

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ANSWERS AND SPECIFIC OBJECTIONS

1. Describe any involvement you have had in working with co-Defendant Hershey Creamery Company to make blenders for use with frozen milkshakes or smoothies produced by Hershey Creamery Company, including identify all persons at Hamilton Beach who have worked with Hershey Creamery Company and state the nature of their work with Hershey Creamery Company.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the description of “any” involvement or the identification of “all” persons.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory.

Hamilton Beach has been a pioneer in the field of making appliances for blending and mixing frozen drinks. Hamilton Beach offered its first commercial drink mixing machine in 1911. Based on this longstanding reputation, Hershey Creamery approached Hamilton Beach in or about

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October 2010, and inquired whether Hamilton Beach could provide a mixer for a line of self-service milk shakes and smoothies that Hershey Creamery planned to offer. Hamilton Beach recognized that a pre-existing product could be adapted for such a use and the parties shared information so that Hamilton Beach could develop a suitable product. Messrs. Hank Wood and Brian O'Flynn managed the initial customer relationship with Hershey Creamery, including product definition.

With feedback from its customer Hershey Creamery, Messrs. Brian Williams and Benjamin Branson were responsible for developing a mixing machine to meet both Hershey's and certain other (*e.g.*, agency) requirements, which became the MIC2000. Starting in or about January 2012, Ms. Anne Marie Blackmon became responsible for managing the day-to-day customer relationship with Hershey Creamery and would communicate feedback from Hershey Creamery, based on use of the MIC2000 in the field, to engineering for further product refinement.

In or about May 2013, Hamilton Beach sold the first 30 units of the MIC2000 to Hershey Creamery. In or about January 2014, Hershey Creamery negotiated a Purchase and Distribution Agreement with Hamilton Beach for the sale of a minimum number of MIC2000 machines in exchange for a limited exclusivity period that expires in or about February 2015. Hershey Creamery has since purchased MIC2000 machines from Hamilton Beach pursuant to this agreement.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 1

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f' real at substantially the same burden as Hamilton Beach: HBBF0000125-138; HBBF0000390-443; HBBF0000446-51;

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HBBF0000454-96; HBBF0000671-84; HBBF0000836; HBBF0001768-69; HBBF0001773;
HBBF0001803; HBBF0001811-13; HBBF0001817; HBBF0001822-26; HBBF0001853;
HBBF0001866-67; HBBF0001883-84; HBBF0001896; HBBF0001916-26; HBBF0001932;
HBBF0001956-57; HBBF0001960; HBBF0001968; HBBF0002029; HBBF0002217-18;
HBBF0003087-89; HBBF0003132-39; HBBF0003142-55; HBBF0003162-76; HBBF0003352-
58; HBBF0003419-22; HBBF0003492-546; HBBF0003638-4428; HBBF0004676;
HBBF0005350-51; HBBF0005363-74; HBBF0005376; HBBF0005392; HBBF0005454;
HBBF0005716-17; HBBF0005786; HBBF0006265; HBBF0006366-88; HBBF0006478;
HBBF0006666-70; HBBF0006675-84; HBBF0006697-706; HBBF0006720-29; HBBF0006745-52;
HBBF0006754-62; HBBF0006766-74; HBBF0006824-31; HBBF0007346; HBBF0007601-86;
HBBF0007723-39; HBBF0007810-13; HBBF0007827; HBBF0007834-37; HBBF0007844-45;
HBBF0007854; HBBF0007857; HBBF0007861; HBBF0007864-65; HBBF0008091;
HBBF0008222; HBBF0008977-90; HBBF0009005-45; HBBF0010710-11; HBBF0010724-
11063; HBBF0011070-71; HBBF0011089; HBBF0011130; HBBF0011132-34; HBBF0011157-
60; HBBF0011226; HBBF0011228; HBBF0011232; HBBF0011234; HBBF0011236-37;
HBBF0011239; HBBF0011241-43; HBBF0011626-37.

2. Identify by trade name and model number, including any internal designation numbers or part numbers, every product you make, use, sell, have made, offer for sale, or imported into the United States from October, 2008 to the present that has a liquid dispenser.

RESPONSE

Hamilton Beach objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the identification of “every” product with a “liquid dispenser,” including those

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products that are not relevant to the litigation nor is this interrogatory reasonably calculated to lead to the discovery of admissible evidence.

Hamilton Beach further objects to this interrogatory because the undefined term “liquid dispenser” is vague, ambiguous, and overbroad.

Subject to and without waiving the foregoing specific and general objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory.

- MIC 2000.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 2

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f’real at substantially the same burden as Hamilton Beach: HBBF0000619-28; HBBF0000837-92; HBBF0001337-39; HBBF0002030; HBBF0003602-19; HBBF0003492-546; HBBF0003622-4428; HBBF0004812; HBBF0005096; HBBF0005099-5129; HBBF0005137-45; HBBF0005749; HBBF0006613-16; HBBF0006660-63; HBBF0008140; HBBF0008413-8750; HBBF0009002; HBBF0009004; HBBF0010030-32; HBBF0010044-46; HBBF0010400-07; HBBF0010450-52; HBBF0010462-66; HBBF0011128-30; HBBF0011281-435; HBBF0010493-500; HBBF0011460-62; HBBF0011598-601; HBBF0011603; HBBF0011608-09; HBBF0011611; HBBF0010568-700.

3. Identify by trade name and model number, including any internal designation numbers or part numbers, every product you make, use, sell, have made, offer for sale, or imported

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into the United States from October, 2008 to the present that has a moveable splash shield and a nozzle that is capable of directing fluid onto that splash shield.

RESPONSE

Hamilton Beach objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the identification of “every” product, including those products that are not relevant to the litigation nor is this interrogatory reasonably calculated to lead to the discovery of admissible evidence.

Hamilton Beach further objects to this interrogatory because the phrases “moveable splash shield” and “nozzle that is capable of directing fluid onto that splash shield” are vague, ambiguous, and overbroad.

Subject to and without waiving the foregoing specific and general objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory.

- MIC2000.
- IMI2000.
- BIC2000.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 3

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by a factfinder at substantially the same burden as Hamilton Beach: HBBF0000619-28; HBBF0000837-92; HBBF0001337-39; HBBF0003385-94; HBBF0003602-19; HBBF0003492-546; HBBF0003638-4428; HBBF0004783-4812; HBBF0005096; HBBF0005099-5129; HBBF0006291; HBBF0006613-16; HBBF0006660-63;

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HBBF0006670; HBBF0007346; HBBF0008053-76; HBBF0008078-79; HBBF0008140; HBBF0008413-8750; HBBF0009002; HBBF0009004; HBBF0009307; HBBF0009596-9943; HBBF0010735; HBBF0010901-02; HBBF0011128-30; HBBF0011240; HBBF0011281-435; HBBF0011463-84; HBBF0011529-58; HBBF0010568-700; HBBF0011649-81.

4. Identify all persons at Hamilton Beach whose responsibilities include research, development, design, testing, clinical evaluation, manufacture, use, marketing, commercialization, promotion, sales, offers for sale, importation, exportation, distribution, and financial reporting with respect to the Accused Product or any product identified in Interrogatories 2-3, describing the pertinent knowledge of each such person and their position or other association with Hamilton Beach.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach objects to this interrogatory is overbroad and unduly burdensome to the extent it asks to identify “all” persons.

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Hamilton Beach further objects to this interrogatory on the basis that this interrogatory comprises at least five discrete subparts counting towards the limit prescribed by Rule 33(a) of 25 interrogatories Plaintiff may serve upon Hamilton Beach. Furthermore, to the extent that Plaintiff proposes to count this interrogatory as a single interrogatory, Hamilton Beach objects to the individual, subparts of this interrogatory.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach's response to Interrogatories Nos. 2 and 3 and its understanding of this interrogatory.

- Hank Wood: Mr. Wood is Vice President, Global Commercial at Hamilton Beach. Mr. Wood may have information relevant to Hamilton Beach's efforts at marketing and sales of the Accused Product.
- Brian O'Flynn: Mr. O'Flynn is the Director, Global Commercial Marketing at Hamilton Beach. Mr. O'Flynn may have information relevant to Hamilton Beach's efforts at marketing, sales, design, and development of the Accused Product.
- Ann Marie Blackmon: Ms. Blackmon is Key Account Manager at Hamilton Beach. Ms. Blackmon may have information relevant to Hamilton Beach's efforts at marketing, sales, design, and development of the Accused Product.
- Brian Williams: Mr. Williams is Group Manager, Project Engineering at Hamilton Beach. Mr. Williams may have information regarding Hamilton Beach's engineering efforts, including the control design, development and testing of the Accused Product.
- Benjamin Branson: Mr. Branson is Manager, Project Engineering at Hamilton Beach. Mr. Branson may have information regarding Hamilton Beach's

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engineering efforts, including the mechanical design, development and testing of the Accused Product.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference the transcript of the Rule 30(b)(6) deposition of Hamilton Beach's Custodian of Records taken on December 4, 2015.

5. Identify the names and positions of the persons likely to have documents or other information with respect to the Accused Product, the Patents-in-Suit or Related Applications.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, including seeking information regarding "Related Applications," beyond the requirements of the Federal Rules of Civil Procedure, and the applicable rules and orders of this Court.

Hamilton Beach further objects to this interrogatory because it is grounded on a document request that fails to identify the sought after documents with reasonable particularity.

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Hamilton Beach further objects because, through this interrogatory, Plaintiff seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Beach's understanding of this interrogatory.

The persons identified in Hamilton Beach's response to Interrogatory No. 4 are likely to have documents or other information that discuss, describe, reference or relate to the Accused Product and the Patents-in-Suit.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference the transcript of the Rule 30(b)(6) deposition of Hamilton Beach's Custodian of Records taken on December 4, 2015.

6. Identify and fully describe, on a quarterly basis for each calendar quarter: the price(s) charged by Hamilton Beach for the Accused Product, the total number of units and date range(s) the Accused Product was made, used, offered for sale, or sold in the United States, imported into the United States, or made in the United States and exported, the total revenue, incremental profit, gross profit, operating profit, and net income for the Accused Product as reported by or for Hamilton Beach under GAAP standards, the method(s) used by Hamilton Beach to calculate those figures, the person(s) most knowledgeable about the information requested in this interrogatory, and documents sufficient to confirm the accuracy of the information provided by Hamilton Beach in response to this interrogatory.

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RESPONSE

Hamilton Beach objects to this interrogatory as premature as Hamilton Beach will produce sales information regarding the Accused Product with core technical documents on or before March 13, 2015, in accordance with the rules of this Court and the scheduling order in this case.

Hamilton Beach further objects to this interrogatory because the phrase “most knowledgeable” is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, such as testing comparative knowledge of employees so as to select the one “most knowledgeable,” that are beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects to this interrogatory to the extent it seeks documents and information pertaining to confidential business information prior to the entry of a suitable protective order.

Hamilton Beach further objects to this interrogatory on the basis that this interrogatory comprises at least four discrete subparts counting towards the limit prescribed by Rule 33(a) of 25 interrogatories Plaintiff may serve upon Hamilton Beach. Furthermore, to the extent that Plaintiff proposes to count this interrogatory as a single interrogatory, Hamilton Beach objects to the individual, subparts of this interrogatory.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach will supplement its response to Interrogatory No. 6, including identifying a person or persons who is reasonably expected to be meaningfully knowledgeable on the subject of this interrogatory, after it produces sales figures with Core Technical Documents, in accordance with the scheduling order in this litigation and the local rules of this Court.

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FIRST SUPPLEMENTARY RESPONSE TO INTERROGATORY NO. 6

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by a fair and substantial burden as Hamilton Beach: HBBF0000452; HBBF0000837-92; HBBF0000897-1335; HBBF0002023; HBBF0002038; HBBF0002047; HBBF0002061; HBBF0003271; HBBF0003492-546; HBBF0003638-4428; HBBF0004557-64; HBBF0004997; HBBF0005427-36; HBBF0005599-607; HBBF0005623-25; HBBF0005635-37; HBBF0005642-44; HBBF0005777-78; HBBF0006278-88; HBBF0006291; HBBF0006670; HBBF0007346; HBBF0007851; HBBF0008232-77; HBBF0009558-9943; HBBF0010735; HBBF0010850-57; HBBF0010863; HBBF0011059-62; HBBF0011064-69; HBBF0011076-82; HBBF0011090-97; HBBF0011099-11103; HBBF0011107-14; HBBF0011128-31; HBBF0011136; HBBF0011157-60; HBBF0011248-51; HBBF0011257; HBBF0011262; HBBF0011604-07; HBBF0011612; HBBF0011635; HBBF0012321-13028.

7. For any Patent-In-Suit that you contend is not infringed by an Accused Product, specify each claim element or limitation that is allegedly not met by the Accused Product, the factual bases for that contention, the three persons most knowledgeable about those facts. Your response may take the form of a claims chart.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client

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privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory because the phrase “most knowledgeable” is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, such as testing comparative knowledge of employees so as to select the one “most knowledgeable” and identification of three (3) witnesses, that are beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is overbroad and premature as Plaintiff has not yet served its infringement contentions identifying which claims of the Patents-In-Suit are being asserted. Hamilton Beach will supplement its response after Plaintiff provides its infringement contentions in accordance with the scheduling order in this case.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach identifies the following two engineers that will have knowledge about the factual bases underlying Hamilton Beach’s contention that it does not infringe the Patents-In-Suit: Brian Williams and Benjamin Branson.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 7

Hamilton Beach further objects that this interrogatory is overbroad and premature to the extent it calls for expert testimony or an legal opinion.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach further answers that, based on an visual inspection of the Accused Product during normal operation and Hamilton Beach’s understanding of the language of asserted claims, the Accused

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Product does not infringe any asserted claim of the Patents-in-Suit at least because the Accused Product does not include each and every limitation of any one asserted claim of the Patents-in-Suit.

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which additional bases for Hamilton Beach's answer above may be ascertained by f'real at substantially the same burden as Hamilton Beach: HBBF0000025; HBBF0000694; HBBF0000740; HBBF0007939-42; HBBF0009351; HBBF0011647-12320. Further to this point, Hamilton Beach incorporates by reference Hamilton Beach's First Supplemental Responses to f'real's Interrogatory Nos. 2 and 3.

8. For any claim of any Patent-In-Suit that you contend is invalid, identify the specific statutory bases for invalidity (*e.g.*, 35 U.S.C. § 102(a)), the factual bases for that contention, any allegedly invalidating prior art or publications, where each element of the claim is found in the prior art or publications, and the three people most knowledgeable about the factual bases for your contention. Your response may take the form of a claims chart.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

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Hamilton Beach further objects to this interrogatory because the phrase “most knowledgeable” is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, such as testing comparative knowledge of employees so as to select the one “most knowledgeable” and identification of three (3) witnesses, that are beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is premature and that Hamilton Beach will provide invalidity contentions in accordance with the scheduling order in this case.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 8

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference its Invalidity Contentions served on May 22, 2015.

9. Identify the names and positions of all persons that rendered opinions regarding the validity, enforceability, or Hamilton Beach's infringement of the Patents-In-Suit, and state whether, and if so why, Hamilton Beach contends it reasonably relied upon any opinions of counsel.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client

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privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects to this interrogatory as premature as Hamilton Beach is not required to identify whether it intends to rely on opinion of counsel no later than two weeks after the Court issues its *Markman* claim construction order.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach will supplement its response to this interrogatory if Hamilton Beach intends to rely upon advice of counsel as a defense.

10. State in detail the circumstances in which Hamilton Beach first learned of the existence of each of the Patents-In-Suit, or any Related Applications, including without limitation the date on which such information was first obtained, the source of such information, any efforts made to secure such information, and the substance of all such information obtained.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

HIGHLY CONFIDENTIAL— SUBJECT TO PROTECTIVE ORDER

Hamilton Beach objects because, through this interrogatory, Plaintiff seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, including seeking information regarding “Related Applications,” beyond the requirements of the Federal Rules of Civil Procedure, and the applicable rules and orders of this Court.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory. Hamilton Beach learned the of Patents-In-Suit on or about May 20, 2009.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 10

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f’real at substantially the same burden as Hamilton Beach: HBBF0000619-28; HBBF0000651-65; HBBF0001337-39; HBBF0001746; HBBF0001766-67.

11. State all facts and circumstances relating to Hamilton Beach's decision to terminate the May 26, 2010 “Patent License Agreement” between f’Real! Foods, LLC and Hamilton Beach Brands, Inc., including identification of the persons involved in making that decision, the reasons why that decision was made and when that decision was made.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this

HIGHLY CONFIDENTIAL— SUBJECT TO PROTECTIVE ORDER

interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the description of “all” facts and circumstances.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory.

The aforementioned license agreement was limited to U.S. Patent No. 7,144,150, U.S. Patent No. 7,520,658, and U.S. Patent No. 7,520,662. The license agreement did not include U.S. Patent No. 5,803,377 which is directed to a crew serve blender designed for grinding and aerating, or shaving and aerating, frozen blocks of ingredients such as the frozen substance sold by f real. The license agreement was limited to products that “the manufacture, use, sale, offer for sale or import of which, but for the License, would infringe any Valid Claims of any of the Licensed Patents.” After entering into the license agreement, Hamilton Beach further investigated the subject patents in view of the product it intended to sell. After further investigation, Hamilton Beach determined the cleaning operation of the intended product was performed in a substantially different manner than the cleaning operation claimed by the subject patents; and Hamilton Beach determined that the claims of the subject patents were narrow and easily avoided. Hamilton Beach

HIGHLY CONFIDENTIAL— SUBJECT TO PROTECTIVE ORDER

also determined that the subject patents afforded them no advantage with respect to a key competitor's products, which also did not practice the subject patents.

Further, the claims of the subject patents recited a number of well-known limitations that were not distinguishable from the prior art. On or about May 4, 2011, representatives from Hamilton Beach, including Hank Wood, participated in a conference call with Will Hartley from f'real and Peter Mikhail, who was f'real's patent counsel. During the call, Hamilton Beach expressed its concerns regarding the strength of the subject patents and recitation of well-known limitations. Specifically, Hamilton Beach noted to f'real and Mr. Mikhail that U.S. Patent No. 4,740,088 to Kelly, Jr. disclosed a number of key limitation of the subject patents. Mr. Mikhail failed to adequately respond to Hamilton Beach's concerns that the subject patents could not be distinguished over the Kelly reference. As a result, and based in part on these discussions with f'real, Hamilton Beach determined that the subject patents were inapplicable to the products of Hamilton Beach and its competitors. Following the parties' discussion as to the weaknesses and limitations of the subject patents, f'real was unwilling to enforce them against Hamilton Beach's competitor. Thus, on or about August 2, 2011, Hamilton Beach informed f'real that Hamilton Beach was terminating the license effective in ninety (90) days. Hamilton Beach will produce a copy of the termination letter from Mr. Hank Wood.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 11

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f'real at substantially the same burden as Hamilton Beach: HBBF0000308-47; HBBF0000390-436; HBBF0000619-28; HBBF0000645-65; HBBF0000685; HBBF0000897-1055; HBBF0001085-1109; HBBF0001135-1335;

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HBBF0001337-41; HBBF0001347-48; HBBF0001351; HBBF0001727-45; HBBF0001747-65;
HBBF0002206-07; HBBF0004557-64; HBBF0004997; HBBF0006965; HBBF0007342;
HBBF0007485; HBBF0007851; HBBF0008140; HBBF0008232-8403; HBBF0009444-55;
HBBF0009952-59; HBBF0009962-65; HBBF0010030-32; HBBF0010044-46; HBBF0010126-
29; HBBF0010244-80; HBBF0010332-42; HBBF0010344-52; HBBF0010470-73;
HBBF0011130; HBBF0010568-700; HBBF0012321-3028.

12. Identify by trade name and model number, including any internal designation numbers or part numbers, every product you made, used, sold, had made, offered for sale, or imported into the United States from May 26, 2010 to the present that you considered to be within the scope of the May 26, 2010 "Patent License Agreement" between fReal! Foods. LLC and Hamilton Beach Brands, Inc.

RESPONSE

Subject to and without waiving the foregoing specific and general objections, Hamilton Beach provides the following answer based on Beach's understanding of this interrogatory.

Hamilton Beach has not made, used, sold, had made, offered for sale, or imported into the United States any product that Hamilton Beach considered to be within the scope of the May 26, 2010 "Patent License Agreement."

HIGHLY CONFIDENTIAL— SUBJECT TO PROTECTIVE ORDER

13. State all facts and circumstances relating to any knowledge or involvement by anyone at Hamilton Beach in "Shake Shop Express" kiosks, including identification of persons with such knowledge or involvement and a description of their knowledge or involvement.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that the phrase "all facts and circumstances relating to any knowledge or involvement by anyone" is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory as premature as the Court has not ruled on Hamilton Beach's Partial Motion to Dismiss Plaintiff's claims for trademark infringement, trade dress infringement, and unfair competition.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 13

Hamilton Beach further objects to this interrogatory as unduly burdensome to the extent that it seeks information unrelated to any claim or defense in this case. Specifically, pursuant to the Court's Order of February 13, 2015 (D.I. 29), Plaintiff's claims for trade dress infringement and unfair competition have been dismissed from this case.

HIGHLY CONFIDENTIAL— SUBJECT TO PROTECTIVE ORDER

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference the transcript of the Rule 30(b)(6) deposition of Hamilton Beach's Custodian of Records taken on December 4, 2015.

Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f'real at substantially the same burden as Hamilton Beach: HBBF0006667-69; HBBF0010788; HBBF0010817-18; HBBF0010849-57; HBBF0010864-72; HBBF0010988-11007; HBBF0011017-27; HBBF0011059-62; and HBBF0011638-46.

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Hamilton Beach Brands, Inc.*

CERTIFICATE OF SERVICE

I, David E. Moore, hereby certify that on January 5, 2016, true and correct copies of the within document were served on the following counsel of record at the addresses and in the manner indicated:

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/s/ David E. Moore

David E. Moore

EXHIBIT B

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC.
HERSHEY CREAMERY COMPANY and
PAUL MILLS D/B/A MILLS BROTHERS
MARKETS,

Hamilton Beach.

C.A. No. 1:14-cv-01270-GMS

**DEFENDANT HAMILTON BEACH BRANDS, INC.'S
INITIAL INVALIDITY CONTENTIONS**

I. INTRODUCTION

Pursuant to the Joint Scheduling Order (D.I. 25), and by agreement of the parties, Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach") submits its Initial Invalidity Contentions with respect to the Patents-in-Suit and claims that Plaintiff f'real Foods, L.L.C. ("Plaintiff" or "f'real") asserted against Hamilton Beach in its Initial Infringement Contentions ("Infringement Contentions"). Specifically, f'real's Infringement Contentions allege that Hamilton Beach's MIC2000 commercial blender practices claims 1-7, 9-14, and 17-27 of U.S. Patent No. 5,803,377 ("the '377 patent"); claims 15, 20, and 22 of U.S. Patent No. 7,144,150 ("the '150 patent"); claims 1 and 5-11 of U.S. Patent No. 7,520,658 ("the '658 patent"); and claim 21 of U.S. Patent No. 7,520,662 ("the '662 patent") (collectively "the Asserted Claims").

With respect to each Asserted Claim, Hamilton Beach: (i) identifies each currently known item of prior art that either anticipates or renders obvious each Asserted Claim; (ii) specifies whether each such item of prior art anticipates or renders obvious the applicable claims;

(iii) submits charts for illustrative prior art references identifying where each limitation of each Asserted Claims is disclosed or rendered obvious by the prior art; and (iv) identifies the grounds for invalidating the Asserted Claims based on indefiniteness, enablement, or written description under 35 U.S.C. § 112.

II. RESERVATION OF RIGHTS

Hamilton Beach reserves the right to amend, modify, and/or supplement these Initial Invalidity Contentions. *See* Delaware Default Standard for Discovery, including Discovery of Electronically Stored Information (“ESI”) at n.3. Specifically, Hamilton Beach reserves the right to amend these Initial Invalidity Contentions if f’real later provides any information that it failed to provide in its Initial Infringement Contentions, or if f’real amends its Initial Infringement Contentions in any way.

These Initial Invalidity Contentions are based on information obtained by Hamilton Beach to date. Fact discovery has only just begun, and expert discovery has not begun. Hamilton Beach intends to seek discovery from Plaintiff and third parties regarding public use and/or the on-sale bar under 35 U.S.C. §102(b), additional prior art under 35 U.S.C. §§102 and 103, improper inventorship and/or derivation under 35 U.S.C. §102(f), earlier invention by other parties under 35 U.S.C. §102(g), and/or the patent applicant’s failure to comply with 35 U.S.C. §112. Based on discovery, Hamilton Beach may uncover additional prior art and invalidity arguments.

The Court has not yet construed any disputed claim terms of the Patents-in-Suit, and additional bases for invalidity may become relevant based on the Court’s construction. Accordingly, Hamilton Beach reserves the right to revise and/or supplement these Initial Invalidity Contentions as discovery proceeds and after the Court construes the Asserted Claims. Moreover, as the Asserted Claims include terms that have yet to be construed by the Court, these

Initial Invalidity Contentions, including the attached claim charts, may reflect alternative positions as to claim construction and scope.

Nothing in these Initial Invalidity Contentions constitutes an admission concerning the proper construction of the claims. Hamilton Beach expressly reserves all rights to propose alternative constructions and to rebut Plaintiff's actual claim construction positions once known. By identifying prior art that would anticipate or render obvious the Asserted Claims, Hamilton Beach does not admit the claim limitations meet the requirements of 35 U.S.C. § 112, and Hamilton Beach does not adopt Plaintiff's apparent claim constructions. Hamilton Beach reserves the right to supplement and/or amend these Initial Invalidity Contentions based on any findings as to the priority date of the Asserted Claims, and/or positions that Plaintiff or its expert witness(es) may take concerning claim interpretation, infringement, and/or invalidity issues.

Prior art not included in this disclosure, whether known or unknown to Hamilton Beach, may become relevant. In particular, Hamilton Beach is currently unaware of the extent, if any, to which Plaintiff will contend that limitations of the Asserted Claims are not disclosed in the prior art that Hamilton Beach identifies, or will contend that any of the identified references do not qualify as prior art under 35 U.S.C. § 102. The identification of any patents as prior art shall be deemed to refer to the application that was submitted for the patent and include identification of any foreign counterpart patents. To the extent that such an issue arises, Hamilton Beach reserves the right to identify additional teachings in the same references or in other references that anticipate or would have rendered the addition of the allegedly missing limitation to the apparatus or method obvious.

Hamilton Beach's claim charts submitted as part of these Initial Invalidity Contentions cite to particular teachings and disclosures of the prior art as applied to features of the Asserted

Claims. Persons having ordinary skill in the art, however, may view an item of prior art generally in the context of other publications, literature, products, and their understanding. Accordingly, the cited portions are only examples, and Hamilton Beach reserves the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that a claim limitation is known or disclosed.

Where Hamilton Beach cites to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure. Similarly, where Hamilton Beach cites to particular text referring to a figure, the citation should be understood to include the figure and caption as well.

Hamilton Beach further reserves the right to rely on uncited portions of the prior art references, other publications, and testimony to establish bases for combinations of certain cited references that render the Asserted Claims obvious. In addition, for any combination, Hamilton Beach reserves the right to rely additionally on information generally known to those skilled in the art and/or common sense.

The references discussed in Hamilton Beach's claim charts may disclose the elements of the Asserted Claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant time frame. The suggested obviousness combinations are sometimes provided in the alternative to Hamilton Beach's anticipation contentions and are not meant to suggest that any reference included in the combinations is not by itself anticipatory.

Hamilton Beach further reserves the right to assert that the Asserted Claims are invalid under 35 U.S.C. § 102(f) in the event that Hamilton Beach obtains evidence that the named inventor of the Patents-in-Suit did not invent (either alone or in conjunction with others) the

subject matter recited in the Asserted Claims or that other inventor(s) were omitted. Hamilton beach also reserves the right to contend that Plaintiff lacks standing to bring this litigation with respect to such patents. Should Hamilton Beach obtain such evidence, it will provide the name of the person(s) from whom and the circumstances under which the invention or any part of it was derived.

Hamilton Beach further intends to rely on inventor admissions concerning the scope of the Asserted Claims or the prior art relevant to the Asserted Claims found in, *inter alia*: the patent prosecution history for the Patents-in-Suit and related patents and/or patent applications; any deposition testimony of the named inventor of the Patents-in-Suit; the papers that Plaintiff files and any evidence that it submits in conjunction with this litigation or any related actions; and the papers that Plaintiff files and any evidence that it submits in response to any petition requesting *Inter Partes* Review (“IPR”) of the Patents-in-Suit or related patents and, if initiated, during the course of such IPR.

Furthermore, nothing stated herein shall be treated as an admission or suggestion that Hamilton Beach’s accused products meet any limitation of any Asserted Claim. Hamilton Beach expressly denies that its products infringe any claim of the Patents-in-Suit.

Finally, in addition to the positions and prior art identified below and the accompanying invalidity claim charts, Hamilton Beach also incorporates, in full, all invalidity contentions, prior art, and invalidity claim charts, including anticipation positions; obviousness positions (including all prior art combinations and motivations to combine); patent ineligible subject matter positions; indefiniteness positions; insufficient written description positions; and non-enablement positions disclosed at any time to Plaintiff by any third party, including any party to another litigation or a U.S. Patent and Trademark Office proceeding involving the Patents-in-Suit or related patents or

patent applications. Further, Hamilton Beach incorporates, in full, all prior art references cited by the Patents-in-Suit, any patents or patent applications related to the Patents-in-Suit, and any patent or patent application sharing a common inventor with the Patents-in-Suit.

III. IDENTIFICATION OF PRIOR ART

Subject to Hamilton Beach's reservations of rights set out above, Hamilton Beach identifies the following references on which it may rely as invalidating one or more of the Asserted Claims of the Patents-in-Suit. In addition to the references cited on the face of the Patents-in-Suit, the admitted prior art references in the specifications of the Patents-in-Suit, and the prosecution histories of the Patents-in-Suit, the prior art references, systems, and products listed below disclose the elements of the Asserted Claims either explicitly, inherently, or via an obvious combination, and may also be relied upon to show the state of the art in the relevant timeframes.

Hamilton Beach further incorporates by reference the prior art references cited in the Patents-in-Suit, any patents or patent applications related to the Patents-in-Suit, and any patent or patent application sharing a common inventor with the Patents-in-Suit. This includes without limitation those identified in any other proceeding involving the Patents-in-Suit or related U.S. or foreign patents. Hamilton Beach additionally incorporates by reference all prior art produced or otherwise known to Plaintiff and all prior art known to the named inventor, any past or current owner, or any individual substantively involved in the prosecution of the Patents-in-Suit.

Hamilton Beach contends that at least some of the apparatuses and products disclosed in one or more of the prior art references identified here or in the attached exhibits are prior art under 35 U.S.C. §§ 102(a), (b), (e), (f) and/or (g), and/or 103. Hamilton Beach's reference to any particular component, device, machine, or other product in these Initial Invalidity Contentions should also be interpreted as a reference to the product itself and any corresponding

patents, publications, or product literature cited here or in the attached exhibits that relate to the cited component, device, machine, or other product. Hamilton Beach does not yet have complete information regarding the dates by which some of the cited products were publicly disclosed, used, sold, or offered for sale, the circumstances under which the research, design, and development activities were conducted, and the identities of the particular individuals involved in such activities through publicly available patents, publications, and product literature. Hamilton Beach anticipates that the actual dates, circumstances, and identities of individuals will be the subject of third party discovery during this lawsuit.

It is understood that a person of ordinary skill in the art reads a prior art reference as a whole and in the context of other publications, literature, and general knowledge in the field. To understand and interpret any specific statement or disclosure in a prior art reference, a person of ordinary skill in the art also relies upon other information including other publications and general scientific, engineering or other relevant knowledge. Hamilton Beach reserves the right to rely upon the general scientific, engineering or other relevant knowledge in the field in interpreting the disclosure of the prior art references. In addition, Hamilton Beach reserves the right to rely upon other publications and on expert testimony to provide context and to aid in the understanding of the prior art references. Hamilton Beach also reserves the right to rely upon other portions of the prior art references, other publications, and the testimony of experts to establish that the alleged inventions would have been obvious to a person of ordinary skill in the art, including the basis for modifying or combining the prior art references. Furthermore, Hamilton Beach reserves the right to rely upon any admissions relating to prior art found in the intrinsic evidence for the Patents-in-Suit.

A. Admitted Prior Art

First, the '377 patent specification acknowledges that certain elements of the Asserted Claims in the '377 patent were already known in the prior art, in particular:

- “methods of making milkshakes and other frozen drinks [such as]: 1) placing frozen ingredients such as ice cream scoops or ice or frozen fruit into a blending/mixing receptacle, then adding liquid such as milk or juice or water, and then blending them together, or 2) using a dispensing freezer of the type in which liquid ingredients are automatically fed into a freezing cylinder, agitated by a dasher in the cylinder during the freezing operation, and then dispensed when desired through a front discharge valve.” '377 patent, 1:14-25.

Thus, f'real at least admits that adding liquid to frozen ingredients to make a milkshake and other frozen drinks was known in the prior art. As discussed below, these admissions in combination with other references render the Asserted Claims of the '377 patent invalid at least under 35 U.S.C. § 103.

Second, the '150, '658, and '662 patents (“the '150 family”) all claim priority to the same provisional application, No. 60/426,622, filed November 15, 2002. As such, each of the patents in the '150 family share a common specification that is identical in disclosure. This common specification acknowledges that nearly every limitation of the Asserted Claims, with respect to the patents in the '150 family, was already known in the prior art, in particular:

- “These [prior art] patents describe a *machine that allows a milkshake or other frozen drink to be quickly made from a block of ingredients pre-frozen into a serving cup*. The frozen contents within the serving cup are broken into small frozen particles using a rotating blade, and blended with an added liquid also using the rotating blade.” See '150 patent, 1:30-35; '658 patent, 1:29-34; '662 patent, 1:29-34 (emphasis added).
- “According to the [prior art] patents, when a milkshake or other frozen drink is to be made, *a serving cup containing the frozen block is positioned in a cup holder which forms a part of the frozen drink machine*. A rotating blade is lowered into the cup and bores through the frozen substance in the cup, grinding it into small frozen particles. As the blade moves towards the bottom

interior of the cup, milk, water, or another *liquid is added to the cup and is blended into the frozen substance* by the rotating blade. Alternatively, the rotating blade may be held at a fixed elevation, and the cup may be advanced towards the blade to move the cup's contents into contact with the blade. In either case, *the cup and/or blade may be reciprocated* to allow the full contents of the cup to be mixed.” See ’150 patent, 1:36-49; ’658 patent, 1:35-47; ’662 patent, 1:35-47 (emphasis added).

- “During mixing, material can splash from the cup onto the drink machine and surrounding area. U.S. Pat. Nos 5,328,263 and 5,439,289 (Neilson) each describe a separate, dedicated lid placement mechanism that positions *a lid onto a cup so as to minimize such splashing* when the contents of the cup are being mixed. U.S. Pat. No. 5,145,250 (Planck) describes *a mixing device wherein the lid and mixing device move axially together* until the lid makes contact with the receptacle, at which time springs keep the lid in contact with the receptacle as the mixing head travels further into the receptacle.” See ’150 patent, 1:50-60; ’658 patent, 1:48-59; ’662 patent, 1:48-59 (emphasis added).

Accordingly, f’real at least admits that: (i) mixing pre-frozen ingredients in a vessel; (ii) reciprocating the mixing blade and/or vessel; and (iii) a splash shield moving axially with the mixing device were known in the prior art. As discussed below, these admissions in combination with other references render the Asserted Claims of the patents in the ’150 family invalid at least under 35 U.S.C. § 103.

B. Patent and Publication Prior Art References

In addition to the references listed on the face of each Patent-in-Suit, the table below lists other prior art patents, patent applications, and patent publications that describe the state of the art and/or render the Asserted Claims invalid under 35 U.S.C. §§ 102 and/or 103. Each listed reference became prior art at least as early as the dates provided on the face of the document. Hamilton Beach reserves the right to rely upon earlier dates of publication or public availability to the extent such information is uncovered during discovery.

At this time, Hamilton Beach does not have any disclosures under 35 U.S.C. §§ 102(a) or 102(b) with respect to non-patent publications. Discovery is ongoing, however, and Hamilton Beach reserves the right to assert such items as prior art and/or statutory bars under 35 U.S.C. §§ 102(a) or 102(b).

Prior Art References	
U.S. Patent No. 2,984,462	U.S. Patent No. 3,147,958
U.S. Patent No. 3,030,083	U.S. Patent No. 3,295,997
U.S. Patent No. 3,086,563	U.S. Patent No. 5,439,289
U.S. Patent No. 3,147,958	U.S. Patent No. 1,090,148
U.S. Patent No. 3,245,664	U.S. Patent No. 1,233,823
U.S. Patent No. 3,295,997	U.S. Patent No. 1,592,788
U.S. Patent No. 2,984,462	U.S. Patent App. Pub. No. 2002/0048626
U.S. Patent No. 4,813,787	U.S. Patent No. 4,506,988
U.S. Patent No. 4,946,286	U.S. Patent No. 4,548,054
U.S. Patent No. 4,506,988	U.S. Patent No. 4,637,221
U.S. Patent No. 4,946,286	U.S. Patent No. 4,708,489
U.S. Patent No. 4,964,333	U.S. Patent No. 4,740,088
U.S. Patent No. 5,071,077	U.S. Patent No. 4,750,844
U.S. Patent No. 5,323,691	U.S. Patent No. 4,822,175
U.S. Patent No. 5,653,157	U.S. Patent No. 5,067,819
U.S. Patent No. 5,766,665	U.S. Patent No. 5,660,469
U.S. Patent No. 2,131,190	U.S. Patent No. 6,341,887
U.S. Patent No. 2,587,135	U.S. Patent No. 6,730,348
U.S. Patent No. 3,505,075	U.S. Patent No. 6,772,675

Prior Art References	
U.S. Patent No. 3,615,673	U.S. Patent No. 6,910,799
U.S. Patent No. 4,506,988	U.S. Patent No. 6,945,157
U.S. Patent No. 4,548,054	U.S. Patent No. RE25490
U.S. Patent No. 4,637,221	

C. Items Offered for Sale or Publicly Known Under Sections 102(a) or 102(b)

At this time, Hamilton Beach does not have any disclosures under 35 U.S.C. §§ 102(a) or 102(b) with respect to items for sale or publically known. Discovery is ongoing, however, and Hamilton Beach reserves the right to assert such items as prior art and/or statutory bars under 35 U.S.C. §§ 102(a) or 102(b).

D. Derivation Under Section 102(f)

At this time, Hamilton Beach does not have any disclosures under 35 U.S.C. § 102(f). Discovery is ongoing, however, and Hamilton Beach reserves the right to assert any of the preceding items of prior art under 35 U.S.C. § 102(f).

E. Priority of Invention References Under Section 102(g)

To the extent the inventions identified in the patents, publications, systems, and other prior art to the Patents-in-Suit identified in these Initial Invalidity Contentions were conceived by another and diligently reduced to practice before the alleged conception and reduction to practice of the Asserted Claims of the Patents-in-Suit, Hamilton Beach alleges that such prior art inventions invalidate the Plaintiffs' Patents-in-Suit under 35 U.S.C. § 102(g).

F. Invalidity Charts

Each Asserted Claim is anticipated and/or rendered obvious by prior art. Hamilton Beach has provided the accompanying exemplary charts for the Patents-in-Suit as listed in the table

below. Individual claim charts illustrate where each element of each Asserted Claim can be found in each item of the listed prior art. To the extent that a claim chart was not provided for any of the references identified above, such references render certain limitations of the Asserted Claims obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references for which a claim chart has been provided, for the reasons explained in detail in Section III.G. As stated above and herein, Hamilton Beach reserves the right to supplement the charts, and the table below, as appropriate.

To the extent that the Court finds that a reference does not expressly disclose certain limitations in the Asserted Claims, such limitations would have been inherent and/or obvious. By mapping the claim language of the Patents-in-Suit to the references, Hamilton Beach does not imply or admit that the claim language satisfies Section 112 of the Patent Act or that the claim language has patentable weight.

Citations from the listed references are not a ratification or acceptance of the manner in which Plaintiff applies particular claim elements to the features and functions of the accused instrumentalities. The citations are instead intended to demonstrate that, if certain claim elements are applied against the prior art in the same manner as Plaintiff applies them in its Initial Infringement Contentions, then certain prior art discloses those claim elements to the same extent. The prior art may also disclose these same claim elements if the claim elements are applied differently than in the Infringement Contentions.

The table below identifies each Exhibits with the corresponding claim chart for each prior art reference identified above with respect to the Asserted Claims of a particular patent.

Exhibit	Claim Chart
A	'662 Patent Claims Invalid in View of U.S. Patent No. 4,740,088 (" <u>Kelly</u> ")

Exhibit	Claim Chart
B	'662 Patent Claims Invalid in View of U.S. Pat. No. 5,439,289 (“ <u>Neilson</u> ”)
C	'662 Patent Claims Invalid in View of U.S. Pat. Pub. No. 2002/0048626 (“ <u>Miller</u> ”)
D	'150 Patent Claims Invalid in View of U.S. Patent No. 4,740,088 (“ <u>Kelly</u> ”)
E	'150 Patent Claims Invalid in View of U.S. Pat. No. 5,439,289 (“ <u>Neilson</u> ”)
F	'150 Patent Claims Invalid in View of U.S. Pat. Pub. No. 2002/0048626 (“ <u>Miller</u> ”)
G	'658 Patent Claims Invalid in View of U.S. Patent No. 4,740,088 (“ <u>Kelly</u> ”)
H	'658 Patent Claims Invalid in View of U.S. Pat. No. 5,439,289 (“ <u>Neilson</u> ”)
I	'658 Patent Claims Invalid in View of U.S. Pat. Pub. No. 2002/0048626 (“ <u>Miller</u> ”)
J	'377 Patent Claims Invalid in View of U.S. Patent No. 3,295,997 (“ <u>Tomlinson</u> ”)

G. Obvious Combinations and Reasons to Modify, Extend, or Combine

The prior art identified in these Initial Invalidity Contentions, including the exemplary charts attached as Exhibits A to J, demonstrate that the concepts of the Asserted Claims were known to persons of ordinary skill in the art prior to the alleged invention of the Patents-in-Suit, and Hamilton Beach believes that no showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached claim charts. There were reasons to make each combination; each combination of art would not have produced unexpected results; and each combination at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415-18 (2007). Indeed, the Supreme Court held that a person of ordinary skill is “a person of creativity, not an automaton” and “in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.* at 420-21; *see also* Examination Guidelines for Determining Obviousness Under 35 U.S.C. §103 in View of the Supreme Court Decision in *KSR International Co. v. Telefax Inc.*, 72 Fed. Reg. 57,526 (Oct. 10, 2007).

In determining whether a claim is obvious, “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 418. In that regard, a patent claim may be obvious if the combination of elements was obvious to try or there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims. The obviousness determination includes consideration of inferences and creative steps that a person of ordinary skill in the art might use. In addition, when a reference is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation as a matter of common sense and routine innovation, 35 U.S.C. § 103 likely bars its patentability.

Accordingly, notwithstanding Hamilton Beach’s belief that a specific motivation is unnecessary to combine the teachings of the prior art cited by the Patents-in-Suit, referenced in Hamilton Beach’s claim charts, and listed above, Hamilton Beach hereby identifies exemplary motivations and reasons.

1. Obvious to combine elements in dependent and independent claims.

Any reference or combination of references that anticipates or makes obvious an independent Asserted Claim also makes obvious any Asserted Claim dependent on that independent claim because every element of each dependent claim was known by a person of ordinary skill at the time of the alleged invention, and it would have been obvious to combine those known elements with the independent claims at least as a matter of common sense and routine innovation. The motivation and/or incentive to combine each of the prior art references

and products identified in the accompanying charts comes from many sources, including, but not limited to, the known, published prior art references and products themselves, the knowledge of those of ordinary skill in the art, the common field of technology of the references, the commonality of the objectives and purposes of the references, and the teachings in the references directed to solving the problems that the Patents-in-Suit was allegedly directed to solving.

2. Motivation based on same field of art and same technical issues.

The references for each of the Patents-in-Suit identify and address many of the same technical issues and suggest similar solutions as the Patents-in-Suit. The reasons or motivation to combine the prior art would thus include, for example, the fact that the prior art is all in the same technological field as all the Patents-in-Suit. *See, e.g.*, '377 patent, 1:8-19 ("The present invention relates generally to the field of machines for mixing liquids . . . Preparation of certain foods and beverages can involve blending, whipping, stirring, etc. the food or beverage."); '150 patent, 1:12-15 ("The present invention relates generally to the field of food processing methods and equipment, and particularly to apparatuses and methods for making milkshakes and other frozen drinks."). And one of ordinary skill in the art implementing such a device would be motivated to investigate the various related existing devices, publications, and/or patents identified in these Initial Invalidity Contentions to address these particular needs. Moreover, many of these references cross-reference and discuss one another and/or other related references by the same named inventor(s) and/or author(s), illustrating the close technical relationship among this group of references. To the extent any piece of prior art refers to or discusses other pieces of prior art, or references related to those pieces of prior art, either expressly or inherently, it would have been obvious to combine those pieces of prior art at least for that reason. Various design incentives and other market forces would also have prompted those combinations and modifications. *See, e.g.*, U.S. Patent No. 3,295,997 ("Tomlinson"), 1:19-22 ("From the

standpoint of a commercial operation, this method is undesirable since it is time consuming”). Furthermore, many of the prior art references list common inventors and assignees or companies operating within the relevant subject matter.

Specifically with respect to the ’377 patent, “[t]he overall goal of this invention is to enable the creation of a consumer preferred old fashioned texture milkshake or other frozen drink that will fit into the operational constraints of today’s high volume fast-food restaurants.” ’377 patent, 1:44-49. Each independent Asserted Claim of the ’377 patent addresses this goal by providing “a rotatable blade having features for grinding the frozen substance and for aerating the ground frozen substance.” *Id.* at 2:19-21. Rotatable blades having such features were well-known more than 40 years before the alleged invention of the ’377 patent. *See, e.g.*, U.S. Pat. No. 3,147,958 (“Stiffler”), 1:7-12 (“This invention relates to a mechanical device for intermixing and blending ice cream in milk, and incorporates a wheel which shaves or cuts off ice cream and in cooperation with a second wheel brings the resultant mixture of ice cream and milk into a smooth form such as would be employed in the so-called popular milk shakes.”). A person of ordinary skill in the art had every motivation to combine references that include common objectives (better blending or mixing) in the identical technical field (blenders and mixers for foods such as ice cream).

Similarly, with respect to the ’150 family, the concept of “rinsing a splash shield” after “blending, whipping, stirring a food or beverage” has also been well known for decades. For example, U.S. Patent No. 4,740,088 (“Kelly”) describes a “frozen confections blending machine” with a “splash shield [] arranged so as to surround like a semi-circle type apron said saddle member 20 and the mixing cone 18.” *See Kelly*, Abstract, 3:14-34. According to Kelly, “[t]o complete the sanitary equipment, at least one spray device 56 is provided inside or about

the enclosure 12.” *Id.* at 4:13-20. As such, to a person of ordinary skill in the art, washing equipment used to blend or mix a food or beverage would have been a known and predictable solution to sanitation issues. Moreover, basic consumer-driven design incentives such as having cleaner commercial food-processing equipment would have further motivated a person of ordinary skill in the art to apply this known technique with a reasonable expectation of success of incorporating or combining its use with other references in the same or related field.

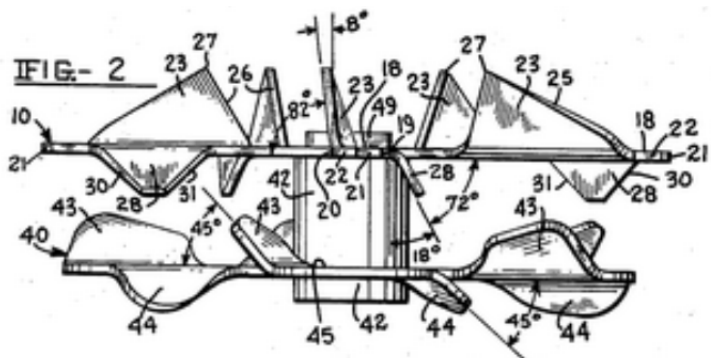
Numerous prior art references, including the non-limiting examples identified above, show that the general subject matter and issues addressed by the Patents-in-Suit were common knowledge before the priority date of the Patents-in-Suit. Furthermore, below are specific examples of prior art combinations with respect to particular limitations. These prior art combinations are not exhaustive; rather, they are illustrative examples of the prior art combinations disclosed generally above. These exemplary combinations are in addition to Hamilton Beach’s references that anticipate the Asserted Claims, as shown in the attached claim charts. Thus, these exemplary combinations should not be interpreted as indicating that any of the individual references discussed in Hamilton Beach’s claim charts are not alone invalidating prior art under 35 U.S.C. §§ 102 and/or 103.

3. It would have been obvious to combine/modify references to arrive at a “grinding/shaving and aerating means/elements.”

Certain Asserted Claims of the ’377 patent include the limitation of: “grinding means” and aeration means” (claim 1); and “shaving elements” and “aeration elements” (claims 11 and 27). To the extent F’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, for example, in one or more of the

references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, Tomlinson describes “cutting or shaving action [] obtained by means of the four cutter blades 38 which have a sharp leading edge 39 and a plurality of notches 40 [and] the result of the combined action of the sharpened edges 39 and the notches 40 on the frozen mixture is to reduce the frozen substance into finely divided chips or flakes.” Tomlinson, 4:69-74. In addition, U.S. Patent No. 3,147,958 (“Stiffler”) teaches “a mechanical device for intermixing and blending ice cream in milk, and incorporates a wheel which shaves or cuts off ice cream and in cooperation with a second wheel brings the resultant mixture of ice cream and milk into a smooth form such as would be employed in the so-called popular milk shakes.” Stiffler, 1:4-12. In Fig. 2 of Stiffler, reproduced below, a top blade functions as a grinding means or shaving element, *see* Stiffler, 3:64-65 (“the upper dispersal knife 10 will start scraping off and cutting into the underside of the ice cream mass”), and the bottom blade functions as an aeration means or aeration element, *see* Stiffler, 4:6-11 (“Since the wheel 40 has a tendency to pull currents of the fluid downwardly, air at the top of the fluid will tend to be drawn into the fluid so as to **aerate that fluid** and produce the normal consistency of a milk shake which is well filled with air throughout its volume.”). Importantly, Stiffler also notes that, “[o]f course the shape of the **dispersal knife [10] will not only shave off** and remove particles of ice cream in the presence of the fluid tending in effect to melt the ice cream to some degree at least, but will **also tend to agitate and**



stir up the fluids in the tank all to the desired end.” Stiffler, 4:10-15 (emphasis added).

Accordingly, it would have been obvious to a person of ordinary skill in the art at the relevant time period to modify Tomlinson in view of Stiffler to arrive at a blade arrangement with both grinding/shaving and aeration means/elements. Specifically, in order to create a better aerated product in the blender/mixer described by Tomlinson, it would have been obvious to a person of ordinary skill in the art to employ the blade design described by Stiffler, or even dispersal knife [10] alone, which grinds/shaves and aerates.

4. It would have been obvious to combine/modify references to arrive at “a cup sensor for detecting the size of a cup.”

Certain Asserted Claims of the ’377 patent include the limitation of: “a cup sensor for detecting the size of a cup” (*see, e.g.*, claims 5, 6, 9, 19, and 23-35). To the extent f’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, for example, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, Tomlinson is directed towards “providing a completely automatic mixing apparatus which requires no personal attention in formulating or mixing the ingredients . . . [where] it is then necessary only to insert the container with the pre-frozen ingredients into the apparatus. describes.” As part of the completely automatic mixing apparatus, Tomlinson teaches the use of “sensing prongs 175 and 176” that act as “a liquid level control” Tomlinson, 14:53-57; 11:45-65. Tomlinson also discloses a detailed “control mechanism [that] includes driving motors, cams, cam followers and micro switches along with other control elements,” which can automatically perform certain operations based on output from the sensing prongs. Tomlinson, 3:17-21. Although Tomlinson does not expressly state that the sensor can be used

for detecting the size of a cup, such a function is either inherently disclosed and/or obvious to a person of ordinary skill in the art at the relevant time period.

For example, U.S. Patent No. 5,071,077 (“Arroubi”) teaches an “a means for detection of the presence and correct positioning of the bowl 3 on the base 2 . . . in which turns a working tool which can for example be: [] a fruit juicer with a rotatable cone.” Arroubi, 2:15, 2:21-39. According to Arroubi, the detector is used “to control the speed changer so as to match to each cover 4 the speed appropriate to the tool.” *Id.* Accordingly, it would have been obvious to a person of ordinary skill in the art to modify the sensor in Tomlinson to detect different characteristics of the cup (*e.g.*, its presence and size), then perform certain operations based on output from the sensor (*e.g.*, controlling the speed of a blender based on the cup size).

5. It would have been obvious to combine/modify references to arrive at “a nozzle oriented towards the splash shield.”

Certain Asserted Claims include the limitation of: “a nozzle oriented towards the splash shield” (*e.g.*, claim 21 of the ’662 patent); “[a nozzle] oriented to direct fluid onto the splash shield within the rinse chamber” (*e.g.*, claim 15 of the ’150 patent). To the extent *Real* contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, orienting a rinsing nozzle at an angle towards the splash shield would have been an obvious modification of U.S. Patent No. 4,740,088 (“Kelly”), U.S. Patent No. 5,439,289 (“Neilson”), or U.S. Patent Pub. No. 2002/0048626 (“Miller”) in view of the teachings found in Kelly, Miller, or U.S. Patent No. 6,341,887 (“Hansen”). Kelly, Neilson, and Miller each disclose a “splash shield.” *See, e.g.*, Kelly, 3:14-34 (“the splash shield 30”); Miller, [0042] (“the present

invention includes attaching the open ended tubular sleeve 54 to the mix filled container 20 . . . for limiting splashing”); Neilson, 3:28-30 (lid engages the receptacle to prevent splashing). Kelly also discloses “at least one spray device 56 is provided inside or about the enclosure 12, Kelly, 3:14-24; and Miller discloses “a water supply or sterilizing solution is dispensed through the valve 127 for delivery of the sterilizing solution or fresh water through a dedicated nozzle 129 for flushing and cleaning the spindle 114 after each use in preparing a flavored shake.” Miller, [0055].

Miller states that the “sleeve used [] can be washed for reuse.” Miller, [0045]. Kelly teaches that “a spray device 56 may be rotatable and tiltable and is, for example, **adjustable in such a manner so as to clean the interior of the auger, the mixing cone and the entire interior** . . . facilitating the expeditions cleaning.” Kelly, 1:61-70; 4:13-18 (emphasis added). Furthermore, for the purpose of keeping “bacteriological level [] below the certain maximum value independent of the operator [and] preventing intermixing of different flavor additives without having to initiate a thorough and time consuming complete washing,” Hansen teaches “a water spray 11 from the spray nozzle 10 hits the funnel essentially opposite the nozzle” [and] “areas of the funnel and the auger which are not hit by the direct spray 11 are also washed. Hansen, 5:25-35. As such, it would have been obvious to a person of ordinary skill in the art at the relevant time period to modify Miller or Kelly to do exactly as they suggest -- adjust the angle of the nozzle to clean other areas of the mixer such as, and in the case of Miller, specifically the splash shield. Moreover, it would have been obvious to modify any one of Kelly, Neilson, or Miller in light of either Kelly or Hansen, to include “a nozzle oriented towards the splash shield” for the purpose of cleaning all interior areas and in order to reduce bacteria and prevent intermixing between batches.

6. It would have been obvious to combine/modify references to arrive at “directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.”

Certain Asserted Claims include the limitation of: “directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.” *See, e.g.*, claim 21 of the ’662 patent. To the extent f’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, to the extent that f’real construes the step of rinsing “while isolating the vessel from the rinsing fluid,” to encompass mere removal of the cup before rinsing the cup, as is the case in f’real’s Infringement Contentions, this step is not expressly disclosed by all of the prior art. Although Hamilton Beach does not subscribe or agree to such a broad construction, it would have been nonetheless inherent or obvious to modify Kelly, Neilson, or Miller to include such a step, since it is not desirable to perform the step of rinsing while the blended/mixed substance is still in the machine (*i.e.*, to rinse the blended/mixed substance along with the splash shield or other parts of the blending/mixing machine). In addition, U.S. Patent No. 1,592,788 (“Supervielle”) discloses that “[a] drink having been mixed and the container having been removed from below the agitator . . . the button 27 can be pressed, opening the water valve and causing the water to descend in a spray upon the agitator.” Supervielle, 2:31-40. Thus, aside from the clearly-recognizable undesirability of ice cream soaked in water (or a cleaning solution), it would have been obvious to one skilled in the art to modify Kelly, Neilson, or Miller in view of Supervielle.

7. It would have been obvious to combine/modify references to arrive at a “rinse chamber having an entrance and a door moveable to a closed position covering the entrance.”

Certain Asserted Claims include the limitation of: “[a] rinse chamber having an entrance and a door moveable to a closed position covering the entrance.” *See, e.g.*, claim 15 of the ’150 patent. To the extent f’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, to the extent that f’real construes “rinse chamber” to encompass the area inside the mixing machine enclosure even where rinsing does not take place, as the case in f’real’s Infringement Contentions, this step is disclosed by the prior art. Although Hamilton Beach does not subscribe or agree to such this construction, Kelly teaches “[a] door 14 having a joint 15 at one of its sides, as indicated in FIG. 2, is mounted permanently on the front side of the enclosure 12.” Kelly, 2:43-58. The “door having a washable inside surface like the entire inside of the apparatus enclosure is hinged to the enclosure allowing for the convenient cleaning of its inside surface.” Kelly, 1:49-55. As such, it would have been obvious to a person of ordinary skill in the art to modify the enclosures of Miller or Neilson in light of Kelly, to include “door moveable to a closed position covering the entrance” for allowing the convenient cleaning of the inside surfaces.

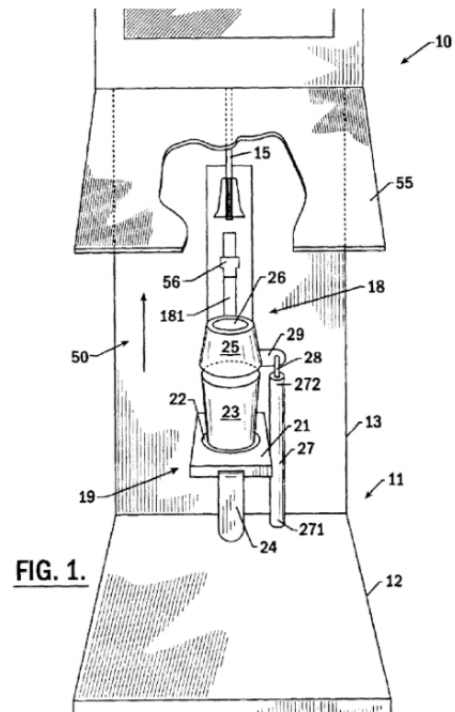
8. It would have been obvious to combine/modify references to arrive at “splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.”

Certain Asserted Claims include the limitation of: “[a] splash shield [] of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel

in opposite directions.” *See, e.g.*, claim 22 of the ’150 patent. To the extent f’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, to the extent that f’real construes “splash shield is of sufficient mass” as a weight to insure there is no separation of the cup from the cup-receiving holder during blending, this element is disclosed by the prior art. U.S. Patent No. 6,945,157 (“Brown”) teaches that a “cup 23 will contain a frozen neutral-flavored product, and a generally dome-shaped lid 25 is placed thereatop” and “arm 28 [that] moves up and down for a predetermined amount of time while the spindle 15 is rotating, thereby moving the cup holder bracket 18 and the cup 23 for a predetermined time to sufficiently blend the selected product.” Brown, 4:23-27; 37-40. As shown in Figure 1 of Brown, reproduced below, the dome-shaped lid [25] is shown by itself, thus necessarily being of sufficient mass to hold the cup to the cup holder during the described “up and down” movement of the “the cup holder bracket 18 and the cup 23 for a predetermined time.”

As such, it would have been obvious to a person of ordinary skill in the art to modify Kelly, Miller, or Neilson in light of Brown, to place a lid of sufficient mass on top of the cup to hold the cup in the cup holder during relative movement of the mixing element and cup in opposite directions.



9. It would have been obvious to combine/modify references to arrive at “a motor . . . to effect axial translation of the mixing element.”

Certain Asserted Claims include the limitation of: “a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel.” *See, e.g.*, claim 1 of the ’658 patent. To the extent f’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, Neilson fully describes this limitation, in that “Two gear motors are disposed within the housing, one employed to rotate a shaft and mixing head and the other to move the mixing head vertically within the container.” In addition, Kelly teaches that “[t]he operational up and down movement of the saddle member 20 together with its components and the cone 18 is accomplished through rather conventional members and linkages among them.” Kelly, 3:3-5. To the extent Miller or Kelly do not expressly indicate the use of a motor for such axial movement, it would have been inherently obvious to do so. Furthermore, U.S. Pat. No. 4,637,221 (“Levine”) discloses “a motor driven agitator that protrudes into a container which is automatically raised and lowered relative to the agitator, when the agitator is energized,” and “vertical motion is imparted to the funnel 21 through a gear motor with a brake.” Levine, 1:47-50, 2:50-57. Tomlinson also describes “a mixing machine wherein a rotatable mixing shaft is automatically raised and lowered by means of a motor driven cam mechanism.” Tomlinson, 2:22-25. As such, it would have been obvious to a person of ordinary skill in the art to modify Miller or Kelly to include a motor in view of Levine or Tomlinson, for the purpose of moving a mixing element/agitator up and down with the cup.

10. It would have been obvious to combine/modify references to arrive at “a splash shield . . . being unrestrained against sliding movement on the shaft in a direction away from the opening.”

Certain Asserted Claims include the limitation of: “a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening.” *See, e.g.*, claim 1 of the ’658 patent. To the extent f’real contends that any of the references identified do not disclose this limitation, the limitation is obvious in light of the background knowledge possessed by a person of ordinary skill in the art, and/or the limitation can be found, in one or more of the references in the admitted art, knowledge of a person of ordinary skill in the art, and disclosed herein.

In particular, although Hamilton Beach believes this term is indefinite, and unamenable to any construction, this limitation is also taught and made obvious by the disclosure of Brown. As discussed above in Section G.7, Figure 1 of Brown shows a dome-shaped lid [25] by itself, thus necessarily being unrestrained against upward movement. As such, for the same reasons discussed previously, it would have been obvious to a person of ordinary skill in the art to modify Kelly, Miller, or Neilson in light of Brown, to include a lid on top of the cup that is unrestrained against axial movement away from the opening of the cup.

IV. INVALIDITY CONTENTIONS BASED ON 35 U.S.C. § 112

Hamilton Beach provide below an identification of Asserted Claims that are—at least as apparently construed by Plaintiff in its Infringement Contentions—invalid pursuant to 35 U.S.C. § 112 as indefinite, not enabled, or lacking a sufficient written description. A more detailed basis for Hamilton Beach’s written description, enablement, and/or indefiniteness defenses will be set forth in Hamilton Beach’s respective expert reports on invalidity, to be served in accordance with the Court’s Scheduling Order. Hamilton Beach have not yet taken any

depositions related to these issues. Hamilton Beach specifically reserves the right to amend and/or supplement these Initial Invalidity Contentions based on a failure to comply with the requirements of 35 U.S.C. § 112. In each case where an independent claim is identified as failing to satisfy § 112, the claims depending from the independent claim fail for the same reasons.

A. Indefiniteness

On June 2, 2014, the United States Supreme Court established a new standard for indefiniteness. *Nautilus, Inc. v. Biosig Instruments, Inc.*, No. 13-369, 134 S. Ct. 2120 (June 2, 2014). Rejecting the Federal Circuit’s prior “insolubly ambiguous” standard, the Supreme Court held that “a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Id.* at 2124.

A number of the Asserted Claims are indefinite because they fail to define the scope of the claims with reasonable certainty. For example, the following terms render one or more of the Asserted Claims indefinite under 35 U.S.C. § 112, as the claims, specification, and prosecution history fail to inform those of ordinary skill in the art of the scope of the claimed invention(s) with any reasonable certainty:

Claim Terms	Claims
“splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions”	’150 patent, claim 22 ’658 patent, claim 1
“a splash shield . . . unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel”	’658 patent, claim 1

“positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening”	’658 patent, claim 6
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In accordance with established practice, Hamilton Beach anticipates that indefiniteness issues will be raised and briefed in connection with claim construction.

B. Enablement

The following terms render one or more of the Asserted Claims invalid for lack of enablement under 35 U.S.C. § 112, as the claims, specification, and prosecution history would not enable one of skill in the art to practice the claimed invention(s) without undue experimentation:

Claim Terms	Claims
“a splash shield . . . unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel”	’658 patent, claim 1
“positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening”	’658 patent, claim 6

In accordance with established practice, Hamilton Beach anticipates that enablement issues will be raised and briefed in connection with claim construction.

C. Written Description

The following terms render one or more of the Asserted Claims invalid for lack of written description in the specification under 35 U.S.C. § 112, as the claims, specification, and prosecution history fail to show a person of skill in the art that the alleged inventors were in possession of the claimed subject matter:

Claim Terms	Claims
“a splash shield . . . unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel”	’658 patent, claim 1
“positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening”	’658 patent, claim 6

In accordance with established practice, Hamilton Beach anticipates that written description issues will be raised and briefed in connection with claim construction.

V. ACCOMPANYING DOCUMENT PRODUCTION

Hamilton Beach has produced invalidating prior art references, at least as part of the production bearing Bates ranges HBBF0001337-1698. These prior art references and other evidence are produced in support of the accompanying invalidity claim charts. Hamilton Beach’s search for prior art references, additional documentation, and/or corroborating evidence is ongoing. Accordingly, Hamilton Beach reserves the right to continue to supplement its production as Hamilton Beach obtains additional prior art references, documentation, and/or corroborating evidence concerning invalidity during the course of discovery.

Dated: May 22, 2015

Respectfully submitted,

/s/ William S. Foster, Jr.
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CERTIFICATE OF SERVICE

I hereby certify that on May 22, 2015, copies of the foregoing were caused to be served upon the following in the manner indicated:

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EXHIBIT C

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,	)	C.A. No. 16-41-GMS
)	
v.	)	CONTAINS CONFIDENTIAL
	)	INFORMATION
HAMILTON BEACH BRANDS, INC., HERSHEY CREAMERY COMPANY and PAUL MILLS d/b/a MILLS BROTHERS MARKETS,	)	SUBJECT TO PROTECTIVE ORDER
)	
Defendants.)	

**DEFENDANT HAMILTON BEACH BRANDS, INC.'S SECOND SUPPLEMENTAL
RESPONSES TO PLAINTIFF'S F'REAL FOODS, LLC'S FIRST SET OF
INTERROGATORIES TO HAMILTON BEACH BRANDS, INC.**

Pursuant to Federal Rules of Civil Procedure 26 and 33 and the Local Rules of this Court, Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach"), by and through its undersigned counsel, provides the following supplemental answers and objections to Plaintiff f'real Foods, LLC's ("f'real" or "Plaintiff") First Set of Interrogatories to Hamilton Beach.

These responses are based on information reasonably available to Hamilton Beach at this time. Discovery in this case is ongoing, and thus, Hamilton Beach reserves the right to supplement, correct, or amend these responses as appropriate.

GENERAL OBJECTIONS

Hamilton Beach expressly incorporates into each of the following supplemental answers all General Objections raised by Hamilton Beach's initial response and first supplemental response to Plaintiff's First Set of Interrogatories to Hamilton Beach, whether or not a supplemental answer refers to any General Objection.

HIGHLY CONFIDENTIAL – SUBJECT TO PROTECTIVE ORDER

ANSWERS AND SPECIFIC OBJECTIONS

1. Describe any involvement you have had in working with co-Defendant Hershey Creamery Company to make blenders for use with frozen milkshakes or smoothies produced by Hershey Creamery Company, including identify all persons at Hamilton Beach who have worked with Hershey Creamery Company and state the nature of their work with Hershey Creamery Company.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the description of “any” involvement or the identification of “all” persons.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory.

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Hamilton Beach has been a pioneer in the field of making appliances for blending and mixing frozen drinks. Hamilton Beach offered its first commercial drink mixing machine in 1911. Based on this longstanding reputation, Hershey Creamery approached Hamilton Beach in or about October 2010, and inquired whether Hamilton Beach could provide a mixer for a line of self-service milk shakes and smoothies that Hershey Creamery planned to offer. Hamilton Beach recognized that a pre-existing product could be adapted for such a use and the parties shared information so that Hamilton Beach could develop a suitable product. Messrs. Hank Wood and Brian O’Flynn managed the initial customer relationship with Hershey Creamery, including product definition.

With feedback from its customer Hershey Creamery, Messrs. Brian Williams and Benjamin Branson were responsible for developing a mixing machine to meet both Hershey’s and certain other (*e.g.*, agency) requirements, which became the MIC2000. Starting in or about January 2012, Ms. Anne Marie Blackmon became responsible for managing the day-to-day customer relationship with Hershey Creamery and would communicate feedback from Hershey Creamery, based on use of the MIC2000 in the field, to engineering for further product refinement.

In or about May 2013, Hamilton Beach sold the first 30 units of the MIC2000 to Hershey Creamery. In or about January 2014, Hershey Creamery negotiated a Purchase and Distribution Agreement with Hamilton Beach for the sale of a minimum number of MIC2000 machines in exchange for a limited exclusivity period that expires in or about February 2015. Hershey Creamery has since purchased MIC2000 machines from Hamilton Beach pursuant to this agreement.

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FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 1

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by a factfinder at substantially the same burden as Hamilton Beach: HBBF0000125-138; HBBF0000390-443; HBBF0000446-51; HBBF0000454-96; HBBF0000671-84; HBBF0000836; HBBF0001768-69; HBBF0001773; HBBF0001803; HBBF0001811-13; HBBF0001817; HBBF0001822-26; HBBF0001853; HBBF0001866-67; HBBF0001883-84; HBBF0001896; HBBF0001916-26; HBBF0001932; HBBF0001956-57; HBBF0001960; HBBF0001968; HBBF0002029; HBBF0002217-18; HBBF0003087-89; HBBF0003132-39; HBBF0003142-55; HBBF0003162-76; HBBF0003352-58; HBBF0003419-22; HBBF0003492-546; HBBF0003638-4428; HBBF0004676; HBBF0005350-51; HBBF0005363-74; HBBF0005376; HBBF0005392; HBBF0005454; HBBF0005716-17; HBBF0005786; HBBF0006265; HBBF0006366-88; HBBF0006478; HBBF0006666-70; HBBF0006675-84; HBBF0006697-706; HBBF0006720-29; HBBF0006745-52; HBBF0006754-62; HBBF0006766-74; HBBF0006824-31; HBBF0007346; HBBF0007601-86; HBBF0007723-39; HBBF0007810-13; HBBF0007827; HBBF0007834-37; HBBF0007844-45; HBBF0007854; HBBF0007857; HBBF0007861; HBBF0007864-65; HBBF0008091; HBBF0008222; HBBF0008977-90; HBBF0009005-45; HBBF0010710-11; HBBF0010724-11063; HBBF0011070-71; HBBF0011089; HBBF0011130; HBBF0011132-34; HBBF0011157-60; HBBF0011226; HBBF0011228; HBBF0011232; HBBF0011234; HBBF0011236-37; HBBF0011239; HBBF0011241-43; HBBF0011626-37.

HIGHLY CONFIDENTIAL – SUBJECT TO PROTECTIVE ORDER

2. Identify by trade name and model number, including any internal designation numbers or part numbers, every product you make, use, sell, have made, offer for sale, or imported into the United States from October, 2008 to the present that has a liquid dispenser.

RESPONSE

Hamilton Beach objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the identification of “every” product with a “liquid dispenser,” including those products that are not relevant to the litigation nor is this interrogatory reasonably calculated to lead to the discovery of admissible evidence.

Hamilton Beach further objects to this interrogatory because the undefined term “liquid dispenser” is vague, ambiguous, and overbroad.

Subject to and without waiving the foregoing specific and general objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory.

- MIC 2000.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 2

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by a fair and substantial burden as Hamilton Beach: HBBF0000619-28; HBBF0000837-92; HBBF0001337-39; HBBF0002030; HBBF0003602-19; HBBF0003492-546; HBBF0003622-4428; HBBF0004812; HBBF0005096; HBBF0005099-5129; HBBF0005137-45; HBBF0005749; HBBF0006613-16; HBBF0006660-63; HBBF0008140; HBBF0008413-8750; HBBF0009002; HBBF0009004; HBBF0010030-32; HBBF0010044-46; HBBF0010400-07; HBBF0010450-52; HBBF0010462-66; HBBF0011128-

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30; HBBF0011281-435; HBBF0010493-500; HBBF0011460-62; HBBF0011598-601; HBBF0011603; HBBF0011608-09; HBBF0011611; HBBF0010568-700.

SECOND SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 2

Subject to and without waiving the foregoing specific and general objections, based on Hamilton Beach's understanding of this interrogatory, Hamilton Beach additionally identifies the MIC-3000 (DQ), also known as the Dairy Queen Hands Free Blizzard Machine or GM44.

3. Identify by trade name and model number, including any internal designation numbers or part numbers, every product you make, use, sell, have made, offer for sale, or imported into the United States from October, 2008 to the present that has a moveable splash shield and a nozzle that is capable of directing fluid onto that splash shield.

RESPONSE

Hamilton Beach objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the identification of "every" product, including those products that are not relevant to the litigation nor is this interrogatory reasonably calculated to lead to the discovery of admissible evidence.

Hamilton Beach further objects to this interrogatory because the phrases "moveable splash shield" and "nozzle that is capable of directing fluid onto that splash shield" are vague, ambiguous, and overbroad.

Subject to and without waiving the foregoing specific and general objections, Hamilton Beach provides the following answer based on Hamilton Beach's understanding of this interrogatory.

- MIC2000.

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- IMI2000.
- BIC2000.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 3

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by a factfinder at substantially the same burden as Hamilton Beach: HBBF0000619-28; HBBF0000837-92; HBBF0001337-39; HBBF0003385-94; HBBF0003602-19; HBBF0003492-546; HBBF0003638-4428; HBBF0004783-4812; HBBF0005096; HBBF0005099-5129; HBBF0006291; HBBF0006613-16; HBBF0006660-63; HBBF0006670; HBBF0007346; HBBF0008053-76; HBBF0008078-79; HBBF0008140; HBBF0008413-8750; HBBF0009002; HBBF0009004; HBBF0009307; HBBF0009596-9943; HBBF0010735; HBBF0010901-02; HBBF0011128-30; HBBF0011240; HBBF0011281-435; HBBF0011463-84; HBBF0011529-58; HBBF0010568-700; HBBF0011649-81.

SECOND SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 3

Subject to and without waiving the foregoing specific and general objections, based on Hamilton Beach's understanding of this interrogatory, Hamilton Beach additionally identifies the MIC-3000 (DQ), also known as the Dairy Queen Hands Free Blizzard Machine or GM44.

4. Identify all persons at Hamilton Beach whose responsibilities include research, development, design, testing, clinical evaluation, manufacture, use, marketing, commercialization, promotion, sales, offers for sale, importation, exportation, distribution, and financial reporting with respect to the Accused Product or any product identified in

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Interrogatories 2-3, describing the pertinent knowledge of each such person and their position or other association with Hamilton Beach.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach objects to this interrogatory is overbroad and unduly burdensome to the extent it asks to identify “all” persons.

Hamilton Beach further objects to this interrogatory on the basis that this interrogatory comprises at least five discrete subparts counting towards the limit prescribed by Rule 33(a) of 25 interrogatories Plaintiff may serve upon Hamilton Beach. Furthermore, to the extent that Plaintiff proposes to count this interrogatory as a single interrogatory, Hamilton Beach objects to the individual, subparts of this interrogatory.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach’s response to Interrogatories Nos. 2 and 3 and its understanding of this interrogatory.

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- Hank Wood: Mr. Wood is Vice President, Global Commercial at Hamilton Beach. Mr. Wood may have information relevant to Hamilton Beach's efforts at marketing and sales of the Accused Product.
- Brian O'Flynn: Mr. O'Flynn is the Director, Global Commercial Marketing at Hamilton Beach. Mr. O'Flynn may have information relevant to Hamilton Beach's efforts at marketing, sales, design, and development of the Accused Product.
- Ann Marie Blackmon: Ms. Blackmon is Key Account Manager at Hamilton Beach. Ms. Blackmon may have information relevant to Hamilton Beach's efforts at marketing, sales, design, and development of the Accused Product.
- Brian Williams: Mr. Williams is Group Manager, Project Engineering at Hamilton Beach. Mr. Williams may have information regarding Hamilton Beach's engineering efforts, including the control design, development and testing of the Accused Product.
- Benjamin Branson: Mr. Branson is Manager, Project Engineering at Hamilton Beach. Mr. Branson may have information regarding Hamilton Beach's engineering efforts, including the mechanical design, development and testing of the Accused Product.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference the transcript of the Rule 30(b)(6) deposition of Hamilton Beach's Custodian of Records taken on December 4, 2015.

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5. Identify the names and positions of the persons likely to have documents or other information with respect to the Accused Product, the Patents-in-Suit or Related Applications.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, including seeking information regarding “Related Applications,” beyond the requirements of the Federal Rules of Civil Procedure, and the applicable rules and orders of this Court.

Hamilton Beach further objects to this interrogatory because it is grounded on a document request that fails to identify the sought after documents with reasonable particularity.

Hamilton Beach further objects because, through this interrogatory, Plaintiff seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Beach’s understanding of this interrogatory.

The persons identified in Hamilton Beach’s response to Interrogatory No. 4 are likely to have documents or other information that discuss, describe, reference or relate to the Accused Product and the Patents-in-Suit.

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FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference the transcript of the Rule 30(b)(6) deposition of Hamilton Beach's Custodian of Records taken on December 4, 2015.

6. Identify and fully describe, on a quarterly basis for each calendar quarter: the price(s) charged by Hamilton Beach for the Accused Product, the total number of units and date range(s) the Accused Product was made, used, offered for sale, or sold in the United States, imported into the United States, or made in the United States and exported, the total revenue, incremental profit, gross profit, operating profit, and net income for the Accused Product as reported by or for Hamilton Beach under GAAP standards, the method(s) used by Hamilton Beach to calculate those figures, the person(s) most knowledgeable about the information requested in this interrogatory, and documents sufficient to confirm the accuracy of the information provided by Hamilton Beach in response to this interrogatory.

RESPONSE

Hamilton Beach objects to this interrogatory as premature as Hamilton Beach will produce sales information regarding the Accused Product with core technical documents on or before March 13, 2015, in accordance with the rules of this Court and the scheduling order in this case.

Hamilton Beach further objects to this interrogatory because the phrase "most knowledgeable" is vague, ambiguous, and overbroad.

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Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, such as testing comparative knowledge of employees so as to select the one “most knowledgeable,” that are beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects to this interrogatory to the extent it seeks documents and information pertaining to confidential business information prior to the entry of a suitable protective order.

Hamilton Beach further objects to this interrogatory on the basis that this interrogatory comprises at least four discrete subparts counting towards the limit prescribed by Rule 33(a) of 25 interrogatories Plaintiff may serve upon Hamilton Beach. Furthermore, to the extent that Plaintiff proposes to count this interrogatory as a single interrogatory, Hamilton Beach objects to the individual, subparts of this interrogatory.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach will supplement its response to Interrogatory No. 6, including identifying a person or persons who is reasonably expected to be meaningfully knowledgeable on the subject of this interrogatory, after it produces sales figures with Core Technical Documents, in accordance with the scheduling order in this litigation and the local rules of this Court.

FIRST SUPPLEMENTARY RESPONSE TO INTERROGATORY NO. 6

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by a factfinder at substantially the same burden as Hamilton Beach: HBBF0000452; HBBF0000837-92; HBBF0000897-1335; HBBF0002023; HBBF0002038; HBBF0002047; HBBF0002061; HBBF0003271; HBBF0003492-546;

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HBBF0003638-4428; HBBF0004557-64; HBBF0004997; HBBF0005427-36; HBBF0005599-607; HBBF0005623-25; HBBF0005635-37; HBBF0005642-44; HBBF0005777-78; HBBF0006278-88; HBBF0006291; HBBF0006670; HBBF0007346; HBBF0007851; HBBF0008232-77; HBBF0009558-9943; HBBF0010735; HBBF0010850-57; HBBF0010863; HBBF0011059-62; HBBF0011064-69; HBBF0011076-82; HBBF0011090-97; HBBF0011099-11103; HBBF0011107-14; HBBF0011128-31; HBBF0011136; HBBF0011157-60; HBBF0011248-51; HBBF0011257; HBBF0011262; HBBF0011604-07; HBBF0011612; HBBF0011635; HBBF0012321-13028.

7. For any Patent-In-Suit that you contend is not infringed by an Accused Product, specify each claim element or limitation that is allegedly not met by the Accused Product, the factual bases for that contention, the three persons most knowledgeable about those facts. Your response may take the form of a claims chart.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory because the phrase “most knowledgeable” is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, such as testing comparative knowledge of employees

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so as to select the one “most knowledgeable” and identification of three (3) witnesses, that are beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is overbroad and premature as Plaintiff has not yet served its infringement contentions identifying which claims of the Patents-In-Suit are being asserted. Hamilton Beach will supplement its response after Plaintiff provides its infringement contentions in accordance with the scheduling order in this case.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach identifies the following two engineers that will have knowledge about the factual bases underlying Hamilton Beach’s contention that it does not infringe the Patents-In-Suit: Brian Williams and Benjamin Branson.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 7

Hamilton Beach further objects that this interrogatory is overbroad and premature to the extent it calls for expert testimony or an legal opinion.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach further answers that, based on an visual inspection of the Accused Product during normal operation and Hamilton Beach’s understanding of the language of asserted claims, the Accused Product does not infringe any asserted claim of the Patents-in-Suit at least because the Accused Product does not include each and every limitation of any one asserted claim of the Patents-in-Suit.

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which additional bases for Hamilton Beach’s answer above may be ascertained

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by f'real at substantially the same burden as Hamilton Beach: HBBF0000025; HBBF0000694; HBBF0000740; HBBF0007939-42; HBBF0009351; HBBF0011647-12320. Further to this point, Hamilton Beach incorporate by reference Hamilton Beach's Supplemental Responses to f'real's Interrogatory Nos. 2 and 3

8. For any claim of any Patent-In-Suit that you contend is invalid, identify the specific statutory bases for invalidity (*e.g.*, 35 U.S.C. § 102(a)), the factual bases for that contention, any allegedly invalidating prior art or publications, where each element of the claim is found in the prior art or publications, and the three people most knowledgeable about the factual bases for your contention. Your response may take the form of a claims chart.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory because the phrase "most knowledgeable" is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, such as testing comparative knowledge of employees so as to select the one "most knowledgeable" and identification of three (3) witnesses, that are beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

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Hamilton Beach further objects that this interrogatory is premature and that Hamilton Beach will provide invalidity contentions in accordance with the scheduling order in this case.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 8

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference its Invalidity Contentions served on May 22, 2015.

9. Identify the names and positions of all persons that rendered opinions regarding the validity, enforceability, or Hamilton Beach's infringement of the Patents-In-Suit, and state whether, and if so why, Hamilton Beach contends it reasonably relied upon any opinions of counsel.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects to this interrogatory as premature as Hamilton Beach is not required to identify whether it intends to rely on opinion of counsel no later than two weeks after the Court issues its *Markman* claim construction order.

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Subject to and without waiving the foregoing general and specific objections, Hamilton Beach will supplement its response to this interrogatory if Hamilton Beach intends to rely upon advice of counsel as a defense.

10. State in detail the circumstances in which Hamilton Beach first learned of the existence of each of the Patents-In-Suit, or any Related Applications, including without limitation the date on which such information was first obtained, the source of such information, any efforts made to secure such information, and the substance of all such information obtained.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach objects because, through this interrogatory, Plaintiff seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach, including seeking information regarding “Related Applications,” beyond the requirements of the Federal Rules of Civil Procedure, and the applicable rules and orders of this Court.

Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach’s understanding of this interrogatory. Hamilton Beach learned of the Patents-In-Suit on or about May 20, 2009.

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FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 10

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f' real at substantially the same burden as Hamilton Beach: HBBF0000619-28; HBBF0000651-65; HBBF0001337-39; HBBF0001746; HBBF0001766-67.

11. State all facts and circumstances relating to Hamilton Beach's decision to terminate the May 26, 2010 "Patent License Agreement" between f'Real! Foods, LLC and Hamilton Beach Brands, Inc., including identification of the persons involved in making that decision, the reasons why that decision was made and when that decision was made.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that this interrogatory is overbroad and unduly burdensome to the extent it asks for the description of "all" facts and circumstances.

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Subject to and without waiving the foregoing general and specific objections, Hamilton Beach provides the following answer based on Hamilton Beach's understanding of this interrogatory.

The aforementioned license agreement was limited to U.S. Patent No. 7,144,150, U.S. Patent No. 7,520,658, and U.S. Patent No. 7,520,662. The license agreement did not include U.S. Patent No. 5,803,377 which is directed to a crew serve blender designed for grinding and aerating, or shaving and aerating, frozen blocks of ingredients such as the frozen substance sold by f'real. The license agreement was limited to products that "the manufacture, use, sale, offer for sale or import of which, but for the License, would infringe any Valid Claims of any of the Licensed Patents." After entering into the license agreement, Hamilton Beach further investigated the subject patents in view of the product it intended to sell. After further investigation, Hamilton Beach determined the cleaning operation of the intended product was performed in a substantially different manner than the cleaning operation claimed by the subject patents; and Hamilton Beach determined that the claims of the subject patents were narrow and easily avoided. Hamilton Beach also determined that the subject patents afforded them no advantage with respect to a key competitor's products, which also did not practice the subject patents.

Further, the claims of the subject patents recited a number of well-known limitations that were not distinguishable from the prior art. On or about May 4, 2011, representatives from Hamilton Beach, including Hank Wood, participated in a conference call with Will Hartley from f'real and Peter Mikhail, who was f'real's patent counsel. During the call, Hamilton Beach expressed its concerns regarding the strength of the subject patents and recitation of well-known limitations. Specifically, Hamilton Beach noted to f'real and Mr. Mikhail that U.S. Patent No.

HIGHLY CONFIDENTIAL – SUBJECT TO PROTECTIVE ORDER

4,740,088 to Kelly, Jr. disclosed a number of key limitation of the subject patents. Mr. Mikhail failed to adequately respond to Hamilton Beach's concerns that the subject patents could not be distinguished over the Kelly reference. As a result, and based in part on these discussions with f'real, Hamilton Beach determined that the subject patents were inapplicable to the products of Hamilton Beach and its competitors. Following the parties' discussion as to the weaknesses and limitations of the subject patents, f'real was unwilling to enforce them against Hamilton Beach's competitor. Thus, on or about August 2, 2011, Hamilton Beach informed f'real that Hamilton Beach was terminating the license effective in ninety (90) days. Hamilton Beach will produce a copy of the termination letter from Mr. Hank Wood.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 11

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f'real at substantially the same burden as Hamilton Beach: HBBF0000308-47; HBBF0000390-436; HBBF0000619-28; HBBF0000645-65; HBBF0000685; HBBF0000897-1055; HBBF0001085-1109; HBBF0001135-1335; HBBF0001337-41; HBBF0001347-48; HBBF0001351; HBBF0001727-45; HBBF0001747-65; HBBF0002206-07; HBBF0004557-64; HBBF0004997; HBBF0006965; HBBF0007342; HBBF0007485; HBBF0007851; HBBF0008140; HBBF0008232-8403; HBBF0009444-55; HBBF0009952-59; HBBF0009962-65; HBBF0010030-32; HBBF0010044-46; HBBF0010126-29; HBBF0010244-80; HBBF0010332-42; HBBF0010344-52; HBBF0010470-73; HBBF0011130; HBBF0010568-700; HBBF0012321-3028.

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12. Identify by trade name and model number, including any internal designation numbers or part numbers, every product you made, used, sold, had made, offered for sale, or imported into the United States from May 26, 2010 to the present that you considered to be within the scope of the May 26, 2010 "Patent License Agreement" between fReal! Foods. LLC and Hamilton Beach Brands, Inc.

RESPONSE

Subject to and without waiving the foregoing specific and general objections, Hamilton Beach provides the following answer based on Beach's understanding of this interrogatory.

Hamilton Beach has not made, used, sold, had made, offered for sale, or imported into the United States any product that Hamilton Beach considered to be within the scope of the May 26, 2010 "Patent License Agreement."

13. State all facts and circumstances relating to any knowledge or involvement by anyone at Hamilton Beach in "Shake Shop Express" kiosks, including identification of persons with such knowledge or involvement and a description of their knowledge or involvement.

RESPONSE

Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by applicable privileges. In particular, Hamilton Beach objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery.

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Hamilton Beach further objects to this interrogatory to the extent that it seeks to impose burdens or obligations on Hamilton Beach beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court.

Hamilton Beach further objects that the phrase “all facts and circumstances relating to any knowledge or involvement by anyone” is vague, ambiguous, and overbroad.

Hamilton Beach further objects to this interrogatory as premature as the Court has not ruled on Hamilton Beach’s Partial Motion to Dismiss Plaintiff’s claims for trademark infringement, trade dress infringement, and unfair competition.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 13

Hamilton Beach further objects to this interrogatory as unduly burdensome to the extent that it seeks information unrelated to any claim or defense in this case. Specifically, pursuant to the Court’s Order of February 13, 2015 (D.I. 29), Plaintiff’s claims for trade dress infringement and unfair competition have been dismissed from this case.

Subject to and without waiving the foregoing general and specific objections, pursuant to Rule 33(d), Hamilton Beach further answers this interrogatory by incorporating by reference the transcript of the Rule 30(b)(6) deposition of Hamilton Beach’s Custodian of Records taken on December 4, 2015.

Hamilton Beach further answers this interrogatory by identifying the following documents from which the answer may be ascertained by f real at substantially the same burden as Hamilton Beach: HBBF0006667-69; HBBF0010788; HBBF0010817-18; HBBF0010849-57; HBBF0010864-72; HBBF0010988-11007; HBBF0011017-27; HBBF0011059-62; and HBBF0011638-46.

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Dated: January 8, 2018

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CERTIFICATE OF SERVICE

I hereby certify that on January 8, 2018, copies of the foregoing were caused to be served upon the following individuals via electronic mail.

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EXHIBIT D

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

VEHICLE IP, LLC,)	
)	
Plaintiff,)	
)	
v.	)	Civ. No. 10-503-SLR
)	
WERNER ENTERPRISES, INC.,)	
)	
Defendant.)	

ORDER

At Wilmington this 20th day of September, 2013, having considered the parties' letters regarding whether defendant may contest plaintiff's infringement claims using arguments raised in defendant's June 14, 2013 expert report; and it being evident that defendant conducted fact discovery without the benefit of its expert's input, so that the non-infringement arguments in dispute were introduced for the first time through its expert without any of the underlying factual bases being vetted through fact discovery;¹

IT IS ORDERED that:

1. Defendant's non-infringement arguments relating to the limitations in claim 1 (D.I. 204 at 1-2), having been proposed for the first time in Dr. Michalson's June 14, 2013 Rebuttal Report (*Id.* at ex. A, ¶ 206) and Dr. Michalson's September 16, 2013

¹To argue ignorance of the court's fundamental trial process, as defendant does, is regrettable but not excusable. While expert discovery is part of the discovery process, it is the part where the experts opine on the facts vetted during fact discovery; the facts vetted during fact discovery are those identified as relevant to the parties' respective contentions. By not timely identifying its non-infringement contentions, defendant has turned the process on its head, to the detriment of both the court and the plaintiff.

Supplemental Report (D.I. 206, ex. B, ¶ 74), may not be raised at trial. More specifically:

a. Dr. Michalson's contention that defendant's system performs a fleet-wide calculation to determine the tax, rather than a per-vehicle calculation as required by the claimed method (D.I. 204, ex. A, ¶ 206; *Id.* at ex. C), was not identified during fact discovery. (See *id.* at ex. B)

b. Dr. Michalson's contention that "taxes are computed 'in response to' the end of a month (or the end of a Quarter)," rather than in response to distance traveled (D.I. 206, ex. B, ¶ 74), was not raised during claim construction and, therefore, is similarly waived.

2. Defendant's non-infringement arguments relating to the limitations in claims 7, 49, and 51 (D.I. 204 at 2-4), having been proposed for the first time in Dr. Michalson's June 14, 2013 Rebuttal Report (*Id.* at ex. A, ¶¶ 211-13, 215-20), and having not been raised in response to plaintiff's infringement contentions (D.I. 206, ex. C), may not be raised at trial. In this regard, while Dr. Michalson may critique Dr. Goldberg's expert opinion, Dr. Michalson may not offer an affirmative opinion of non-infringement, as he failed to do so in his initial expert report.

3. Defendant's positions relating to this court's claim construction, having been proposed in Dr. Michalson's Supplemental Report (*Id.* at ex. B) and being inconsistent with this court's claim construction order (D.I. 201), may not be raised at trial.

4. The court declines to allow any further papers to be filed regarding these topics.

5. Consistent with the court's prior discussion with the parties and its revised

preliminary jury instructions, no further reference to the re-examination proceedings is appropriate.


United States District Judge

EXHIBIT E

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC , and
RICH PRODUCTS CORPORATION

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC.
HERSHEY CREAMERY COMPANY and
PAUL MILLS D/B/A MILLS BROTHERS
MARKETS,

Defendants.

C.A. No. 16-41-GMS

**DEFENDANT HAMILTON BEACH BRANDS, INC.'S
FINAL PATENT INVALIDITY CONTENTIONS**

I. INTRODUCTION

Pursuant to the Scheduling Order (D.I. 53), and the Stipulation and Order Amending the Scheduling Order (D.I. 82), Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach") submits its Final Patent Invalidity Contentions with respect to the Patents-in-Suit and claims that Plaintiffs f'real Foods, L.L.C. ("f'real") and Rich Products Corporation ("Rich") (collectively "Plaintiffs") asserted against Hamilton Beach in their Final Infringement Contentions ("Infringement Contentions"). Specifically, Plaintiffs' Infringement Contentions allege that Hamilton Beach's MIC2000, BIC2000, MIC/BIC3000-DQ, and IMI2000 commercial blenders practice various combinations of claims 1-4, 6, 9, 11-14, 18-22, 25, and 27 of U.S. Patent No. 5,803,377 ("the '377 Patent"); claims 15, 20, and 22 of U.S. Patent No. 7,144,150 ("the '150 Patent"); claims 1 and 5-11 of U.S. Patent No. 7,520,658 ("the '658 Patent"); and claim 21 of U.S. Patent No. 7,520,662 ("the '662 Patent") (collectively "the Asserted Claims").

With respect to each Asserted Claim, Hamilton Beach: (i) identifies each currently known item of prior art that either anticipates or renders obvious each Asserted Claim; (ii) specifies whether each such item of prior art anticipates or renders obvious the applicable claims; (iii) submits charts for illustrative prior art references identifying where each limitation of each Asserted Claims is disclosed or rendered obvious by the prior art; and (iv) identifies the grounds for invalidating the Asserted Claims based on indefiniteness, enablement, written description, or lack of corresponding structure disclosed in the specification under 35 U.S.C. § 112.

II. RESERVATION OF RIGHTS

Hamilton Beach reserves the right to amend, modify, and/or supplement these Invalidity Contentions. *See* Delaware Default Standard for Discovery, including Discovery of Electronically Stored Information (“ESI”) at n.3. Specifically, Hamilton Beach reserves the right to amend these Invalidity Contentions if Plaintiffs later provide any information that they failed to provide in their Final Infringement Contentions, or otherwise changes their infringement positions in any way.

These Invalidity Contentions are based on information obtained by Hamilton Beach to date. Fact discovery is still ongoing, and expert discovery has not begun. Hamilton Beach intends to seek and has sought discovery from Plaintiffs and third parties regarding public use and/or the on-sale bar under 35 U.S.C. §102(b), additional prior art under 35 U.S.C. §§102 and 103, improper inventorship and/or derivation under 35 U.S.C. §102(f), earlier invention by other parties under 35 U.S.C. §102(g), and/or the patent applicant’s failure to comply with 35 U.S.C. §112. Based on discovery, Hamilton Beach may uncover additional prior art and invalidity arguments.

Hamilton Beach also reserves the right to revise and/or supplement these Invalidity Contentions as discovery proceeds and if the Court changes any construction of the Asserted Claims.

Nothing in these Invalidity Contentions constitutes an admission concerning the proper construction of the claims. By identifying prior art that would anticipate or render obvious the Asserted Claims, Hamilton Beach does not admit the claim limitations meet the requirements of 35 U.S.C. § 112. Hamilton Beach reserves the right to supplement and/or amend these Invalidity Contentions based on any findings as to the priority date of the Asserted Claims, and/or positions that Plaintiffs or their expert witnesses(s) may take concerning claim interpretation, infringement, and/or invalidity issues.

Prior art not included in this disclosure, whether known or unknown to Hamilton Beach, may become relevant. In particular, Hamilton Beach is currently unaware of the extent, if any, to which Plaintiffs will contend that limitations of the Asserted Claims are not disclosed in the prior art that Hamilton Beach identifies, or will contend that any of the identified references do not qualify as prior art under 35 U.S.C. § 102. The identification of any patents as prior art shall be deemed to refer to the application that was submitted for the patent and include identification of any foreign counterpart patents. To the extent that such an issue arises, Hamilton Beach reserves the right to identify additional teachings in the same references or in other references that anticipate or would have rendered the addition of the allegedly missing limitation to the apparatus or method obvious.

Hamilton Beach's claim charts submitted as part of these Invalidity Contentions cite to particular teachings and disclosures of the prior art as applied to features of the Asserted Claims. Persons having ordinary skill in the art, however, may view an item of prior art generally in the

context of other publications, literature, products, and their understanding. Accordingly, the cited portions are only exemplary, and Hamilton Beach reserves the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that a claim limitation is known or disclosed.

Where Hamilton Beach cites to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure. Similarly, where Hamilton Beach cites to particular text referring to a figure, the citation should be understood to include the figure and caption as well.

Hamilton Beach further reserves the right to rely on uncited portions of the prior art references, other publications, and testimony to establish bases for combinations of certain cited references that render the Asserted Claims obvious. In addition, for any combination, Hamilton Beach reserves the right to rely additionally on information generally known to those skilled in the art and/or common sense.

The references discussed in Hamilton Beach's claim charts may disclose the elements of the Asserted Claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant time frame. The suggested obviousness combinations are sometimes provided in the alternative to Hamilton Beach's anticipation contentions and are not meant to suggest that any reference included in the combinations is not by itself anticipatory.

Hamilton Beach further intends to rely on inventor admissions concerning the scope of the Asserted Claims or the prior art relevant to the Asserted Claims found in, *inter alia*: the patent prosecution history for the Patents-in-Suit and related patents and/or patent applications; any deposition testimony of the named inventor of the Patents-in-Suit; the papers that Plaintiffs

file and any evidence that they submit in conjunction with this litigation or any related actions or proceedings regarding the Patents-in-Suit.

Furthermore, nothing stated herein shall be treated as an admission or suggestion that Hamilton Beach's accused products meet any limitation of any Asserted Claim. Hamilton Beach expressly denies that its products infringe any claim of the Patents-in-Suit.

Finally, in addition to the positions and prior art identified below and the accompanying invalidity claim charts, Hamilton Beach also incorporates, in full, all invalidity contentions, prior art, and invalidity claim charts, including anticipation positions, obviousness positions (including all prior art combinations and motivations to combine), patent ineligible subject matter positions, indefiniteness positions, insufficient written description positions, and non-enablement positions disclosed at any time to Plaintiffs by any third party, including any party to another litigation or a U.S. Patent and Trademark Office proceeding involving the Patents-in-Suit or related patents or patent applications. Further, Hamilton Beach incorporates, in full, all prior art references cited by the Patents-in-Suit, any patents or patent applications related to the Patents-in-Suit, and any patent or patent application sharing a common inventor with the Patents-in-Suit.

III. IDENTIFICATION OF PRIOR ART

Subject to Hamilton Beach's reservations of rights set out above, Hamilton Beach identifies the following references on which it may rely as invalidating one or more of the Asserted Claims of the Patents-in-Suit. In addition to the references cited on the face of the Patents-in-Suit, the admitted prior art references in the specifications of the Patents-in-Suit, and the prosecution histories of the Patents-in-Suit, the prior art references, systems, and products listed below disclose the elements of the Asserted Claims either explicitly, inherently, or via an obvious combination, and may also be relied upon to show the state of the art in the relevant timeframes.

Hamilton Beach further incorporates by reference the prior art references cited in the Patents-in-Suit, any patents or patent applications related to the Patents-in-Suit, and any patent or patent application sharing a common inventor with the Patents-in-Suit. This includes without limitation those identified in any other proceeding involving the Patents-in-Suit or related U.S. or foreign patents. Hamilton Beach additionally incorporates by reference all prior art produced or otherwise known to Plaintiffs and all prior art known to the named inventor, any past or current owner, or any individual substantively involved in the prosecution of the Patents-in-Suit.

Hamilton Beach contends that at least some of the apparatuses and products disclosed in one or more of the prior art references identified here or in the attached exhibits are prior art under 35 U.S.C. §§ 102(a), (b), (e), (f) and/or (g), and/or 103. Hamilton Beach's reference to any particular component, device, machine, or other product in these Invalidity Contentions should also be interpreted as a reference to the product itself and any corresponding patents, publications, or product literature cited here or in the attached exhibits that relate to the cited component, device, machine, or other product. Hamilton Beach does not yet have complete information regarding the dates by which some of the cited products were publicly disclosed, used, sold, or offered for sale, the circumstances under which the research, design, and development activities were conducted, and the identities of the particular individuals involved in such activities through publicly available patents, publications, and product literature. Hamilton Beach anticipates that the actual dates, circumstances, and identities of individuals will be the subject of third party discovery during this lawsuit.

It is understood that a person of ordinary skill in the art reads a prior art reference as a whole and in the context of other publications, literature, and general knowledge in the field. To understand and interpret any specific statement or disclosure in a prior art reference, a person of

ordinary skill in the art also relies upon other information including other publications and general scientific, engineering or other relevant knowledge. Hamilton Beach reserves the right to rely upon the general scientific, engineering or other relevant knowledge in the field in interpreting the disclosure of the prior art references. In addition, Hamilton Beach reserves the right to rely upon other publications and on expert testimony to provide context and to aid in the understanding of the prior art references. Hamilton Beach also reserves the right to rely upon other portions of the prior art references, other publications, and the testimony of experts to establish that the alleged inventions would have been obvious to a person of ordinary skill in the art, including the basis for modifying or combining the prior art references. Furthermore, Hamilton Beach reserves the right to rely upon any admissions relating to prior art found in the intrinsic evidence for the Patents-in-Suit.

A. Admitted Prior Art

First, the '377 Patent specification acknowledges that certain elements of the Asserted Claims in the '377 Patent were already known in the prior art, in particular:

- “methods of making milkshakes and other frozen drinks [such as]: 1) placing frozen ingredients such as ice cream scoops or ice or frozen fruit into a blending/mixing receptacle, then adding liquid such as milk or juice or water, and then blending them together, or 2) using a dispensing freezer of the type in which liquid ingredients are automatically fed into a freezing cylinder, agitated by a dasher in the cylinder during the freezing operation, and then dispensed when desired through a front discharge valve.” '377 patent, 1:14-25.

Thus, Plaintiffs at least admit that adding liquid to frozen ingredients to make a milkshake and other frozen drinks was known in the prior art. As discussed below, these admissions in combination with other references render the Asserted Claims of the '377 Patent invalid at least under 35 U.S.C. § 103.

Second, the '150, '658, and '662 Patents (“the '150 Family”) all claim priority to the same provisional application, No. 60/426,622, filed November 15, 2002. As such, each of the patents in the '150 Family share a common specification and original disclosure. This common disclosure acknowledges that nearly every limitation of the Asserted Claims, with respect to the patents in the '150 Family, was already known in the prior art, in particular:

- “These [prior art] patents describe a *machine that allows a milkshake or other frozen drink to be quickly made from a block of ingredients pre-frozen into a serving cup*. The frozen contents within the serving cup are broken into small frozen particles using a rotating blade, and blended with an added liquid also using the rotating blade.” See '150 Patent, 1:30-35; '658 Patent, 1:29-34; '662 Patent, 1:29-34 (emphasis added).
- “According to the [prior art] patents, when a milkshake or other frozen drink is to be made, *a serving cup containing the frozen block is positioned in a cup holder which forms a part of the frozen drink machine*. A rotating blade is lowered into the cup and bores through the frozen substance in the cup, grinding it into small frozen particles. As the blade moves towards the bottom interior of the cup, milk, water, or another *liquid is added to the cup and is blended into the frozen substance* by the rotating blade. Alternatively, the rotating blade may be held at a fixed elevation, and the cup may be advanced towards the blade to move the cup's contents into contact with the blade. In either case, *the cup and/or blade may be reciprocated* to allow the full contents of the cup to be mixed.” See '150 Patent, 1:36-49; '658 Patent, 1:35-47; '662 Patent, 1:35-47 (emphasis added).
- “During mixing, material can splash from the cup onto the drink machine and surrounding area. U.S. Pat. Nos 5,328,263 and 5,439,289 (Neilson) each describe a separate, dedicated lid placement mechanism that positions *a lid onto a cup so as to minimize such splashing* when the contents of the cup are being mixed. U.S. Pat. No. 5,145,250 (Planck) describes *a mixing device wherein the lid and mixing device move axially together* until the lid makes contact with the receptacle, at which time springs keep the lid in contact with the receptacle as the mixing head travels further into the receptacle.” See '150 Patent, 1:50-60; '658 Patent, 1:48-59; '662 Patent, 1:48-59 (emphasis added).

Accordingly, Plaintiffs at least admit that: (i) mixing pre-frozen ingredients in a vessel; (ii) reciprocating the mixing blade and/or vessel; and (iii) a splash shield moving axially with the mixing device were known in the prior art.

Moreover, during prosecution of the parent '150 Patent, f'real recited claims in Jepson format, by which f'real admitted the subject matter of the preamble. Specifically, original claim 10 of the application from which the '150 Patent issued recited that:

10. On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including a holder for receiving the vessel and a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:

See U.S. Patent Application No. 10/715,171, Application-as-filed at 8. Thus, these elements are admitted prior art, including certain subject matter is the corresponding dependent (*i.e.*, “the mixing element is carried by a shaft” as recited in claim 11), as well.

As discussed below, these admissions from the intrinsic record of the '150 Family in combination with other references render the Asserted Claims of the patents in the '150 Family invalid at least under 35 U.S.C. § 103.

B. Patent and Publication Prior Art References

In addition to the references listed on the face of each Patent-in-Suit, the table below lists other prior art patents, patent applications, and patent publications that describe the state of the art and/or render the Asserted Claims invalid under 35 U.S.C. §§ 102 and/or 103. Each listed reference became prior art at least as early as the dates provided on the face of the document. Hamilton Beach reserves the right to rely upon earlier dates of publication or public availability to the extent such information is uncovered during discovery.

At this time, Hamilton Beach knows of at least one disclosure under 35 U.S.C. §§ 102(a) or 102(b) with respect to non-patent publications. Discovery is ongoing, however, and Hamilton

Beach reserves the right to supplement assertion of such items as prior art and/or statutory bars under 35 U.S.C. §§ 102(a) or 102(b).

Prior Art References	
U.S. Patent No. 2,984,462	U.S. Patent No. 3,154,123
U.S. Patent No. 3,030,083	U.S. Patent No. 3,295,997
U.S. Patent No. 3,086,563	U.S. Patent No. 5,439,289
U.S. Patent No. 3,147,958	U.S. Patent No. 1,090,148
U.S. Patent No. 3,245,664	U.S. Patent No. 1,233,823
U.S. Patent No. 2,078,190	U.S. Patent No. 1,592,788
U.S. Patent No. 2,984,461	U.S. Patent App. Pub. No. 2002/0048626
U.S. Patent No. 4,813,787	U.S. Patent No. 4,548,054
U.S. Patent No. 4,506,988	U.S. Patent No. 4,637,221
U.S. Patent No. 4,946,286	U.S. Patent No. 4,708,489
U.S. Patent No. 4,964,333	U.S. Patent No. 4,740,088
U.S. Patent No. 5,071,077	U.S. Patent No. 4,750,844
U.S. Patent No. 5,323,691	U.S. Patent No. 4,822,175
U.S. Patent No. 5,653,157	U.S. Patent No. 5,067,819
U.S. Patent No. 5,766,665	U.S. Patent No. 5,660,469
U.S. Patent No. 2,131,190	U.S. Patent No. 6,341,887
U.S. Patent No. 2,587,135	U.S. Patent No. 6,730,348
U.S. Patent No. 3,505,075	U.S. Patent No. 6,772,675
U.S. Patent No. 3,615,673	U.S. Patent No. 6,910,799
U.S. Patent No. 5,145,250	U.S. Patent No. 6,945,157
U.S. Patent No. 6,068,875	U.S. Patent No. RE25490

Prior Art References	
U.S. Patent App. Pub. No. 2005/193896	U.S. Patent No. 5,778,761
U.S. Patent No. 6,164,575	U.S. Patent No. 4,096,893
WO 00/36925 A1	U.S. Patent No. 5,599,103
U.S. Patent No. 2,564,887	U.S. Patent No. 2,995,158
U.S. Patent No. 4,590,975	JP 1992-136787
U.S. Patent No. 0,496,674	U.S. Patent No. 0,934,537
U.S. Patent No. 1,313,830	U.S. Patent No. 1,496,611
U.S. Patent No. 1,560,826	U.S. Patent No. 1,847,226
U.S. Patent No. 1,911,202	U.S. Patent No. 1,913,210
U.S. Patent No. 2,003,259	U.S. Patent No. 2,012,486
U.S. Patent No. 2,026,240	U.S. Patent No. 2,031,770
U.S. Patent No. 2,072,691	U.S. Patent No. 2,115,809
U.S. Patent No. 2,134,759	U.S. Patent No. 2,667,423
U.S. Patent No. 2,668,765	U.S. Patent No. 2,701,131
U.S. Patent No. 2,863,776	U.S. Patent No. 2,898,094
U.S. Patent No. 2,941,885	U.S. Patent No. 2,967,433
U.S. Patent No. 3,171,635	U.S. Patent No. 3,365,304
U.S. Patent No. 3,503,757	U.S. Patent No. 3,514,080
U.S. Patent No. 3,647,472	U.S. Patent No. 3,665,722
U.S. Patent No. 3,738,619	U.S. Patent No. 3,865,353
U.S. Patent No. 3,889,002	U.S. Patent No. 3,922,361
U.S. Patent No. 3,939,001	U.S. Patent No. 3,949,098
U.S. Patent No. 4,169,681	U.S. Patent No. 4,358,298

Prior Art References	
U.S. Patent No. 4,434,186	U.S. Patent No. 4,544,277
U.S. Patent No. 4,547,076	U.S. Patent No. 4,637,221
U.S. Patent No. 4,708,487	U.S. Patent No. 4,828,866
U.S. Patent No. 4,842,884	U.S. Patent No. 5,114,045
U.S. Patent No. 5,150,967	U.S. Patent No. 5,328,263
U.S. Patent No. 5,580,007	U.S. Patent No. 5,962,060
U.S. Patent No. 6,326,047	U.S. Patent No. 6,453,803
U.S. Patent No. 6,474,862	

C. Items Offered for Sale or Publicly Known Under Sections 102(a) or 102(b)

The '150, '658, and '622 Patents are invalid due to Mr. Farrell's public disclosure of the claimed invention more than one year prior to the priority date. *See* Defendant Hamilton Beach Brands, Inc.'s Answer and Counterclaims (D.I. 10) at ¶¶ 64-77. Mr. Farrell showed a video at the National Association of Convenience Stores ("NACS") Show in Orlando, Florida during the weekend of October 3-6, 2002. *Id.* at ¶ 70. This video, which simulates an actual mixing cycle, shows a step of unshielding the vessel opening and directing rinsing fluid onto the splash shield while isolating the vessel from the rinsing fluid, as recited in asserted independent claim 21 of the '622 Patent, a mixing machine having a rinse chamber, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance, as recited in asserted independent claim 15 of the '150 Patent; and a splash shield unrestrained against sliding movement and having sufficient mass to retain the vessel within the holder, as recited in asserted independent claims 1 and 6 of the '658 Patent. *Id.* at ¶¶ 64-71. This public disclosure of the claimed subject matter is a statutory bar under 35 U.S.C. § 102(b) and the '150, '658, and '622

Patents are invalid. Further, Mr. Farrell offered to sell f'real's new blender to certain gas station chains, such as KwikTrip at the NACS Show. *See* D.I. 10 at ¶¶ 70-71. This offer for sale more than one year prior to the priority date of the '150, '658, and '622 Patents serves as an on-sale bar under 35 U.S.C. § 102(b). Discovery is ongoing and Hamilton Beach reserves the right to supplement such assertion of items as prior art and/or statutory bars under 35 U.S.C. §§ 102(a) or 102(b).

D. Improper Inventorship and Derivation Under Section 102(f) and Section 101

The '150, '658, and '622 Patents are invalid and unenforceable under pre-AIA 35 U.S.C. § 102(f) and/or 35 U.S.C. § 101 because the patents do not name the true inventor or otherwise omit co-inventors.¹ Under pre-AIA 35 U.S.C. § 102(f), a person shall be entitled to a patent unless he did not himself invent the subject matter sought to be patented. Under 35 U.S.C. § 101, “*Whoever* invents or discovers . . . may obtain a patent therefor.” (Emphasis added). James Farrell is listed as the sole inventor of the '150, '658, and '622 Patents. *See* D.I. 1 at ¶¶ 15-18, Exs. 2-4. However, Messrs. Andrew Geppert and Thomas Kramer, not Mr. Farrell, conceived and reduced to practice various aspects of the mixing machine, including a splash shield and a method for rinsing a splash shield that includes the step of directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid. *See* D.I. 10 at ¶¶ 50-63. Even if Mr. Farrell is properly named as an inventor of the '150, '658, and '622 Patents, he is not

¹ Pre-AIA 35 U.S.C. § 102(f) applies in this case because the '150, '658, and '622 Patents issued before the effective date of the AIA. *See e.g.*, Leahy-Smith America Invents Act, Pub. L. No. 112–29, § 35, 125 Stat. 284, 341 (2011) (“Except as otherwise provided in this Act, the provisions of this Act shall take effect upon the expiration of the 1-year period beginning on the date of the enactment of this Act and shall apply to any patent issued on or after that effective date”); *Cubist Pharmaceuticals, Inc. v. Hospira, Inc.*, 75 F.Supp. 3d. 641 (D. Del. Dec. 8, 2014) (finding defense under 102(f) precluded because it was untimely and not finding 102(f) was not an appropriate statutory basis for a defense). Alternatively, the '150, '658, and '622 Patents are invalid for naming the incorrect inventor under 35 U.S.C. § 101.

the sole inventor and he improperly derived claimed subject matter from the work of Messrs. Geppert and Kramer from Kablooē. *See id.*

Mr. Farrell fraudulently presented himself as the sole inventor of the subject matter claimed in each of the '150, '658, and '662 Patents. *See* D.I. 10 at ¶¶ 53 and 60-62. Mr. Farrell deliberately concealed the true inventors' involvement by signing the Declarations for each of the '150, '658, and '662 Patents as the sole inventor, and committed egregious misconduct by misrepresenting the inventorship to the USPTO. *Id.* at ¶¶ 53, 63, and 72-76. Mr. Farrell concealed a critical requirement for obtaining a patent - the fact that he did not solely invent the claimed subject matter. *Id.* at ¶ 63. "[W]hen named inventors deliberately conceal a true inventor's involvement, the applicants have committed inequitable conduct and the patent is unenforceable even as to an innocent co-inventor." *Advanced Magnetic Closures, Inc. v. Rome Fastener Corp.*, 607 F.3d 817, 828 (Fed. Cir. 2010) (citing *Frank's Casing Crew & Rental Tools, Inc. v. PMR Techs., Ltd.*, 292 F.3d 1363, 1376-77 (Fed. Cir. 2002) (finding the named inventors committed inequitable conduct by deliberately excluding an innocent co-inventor from patent application). Because Mr. Farrell deliberately concealed the true inventor's identity, he committed inequitable conduct and the '150, '658, and '622 Patents are unenforceable.

Accordingly, Plaintiffs lack standing to bring this litigation with respect to such patents. The assignment of rights from Mr. Farrell to f'real is ineffectual and/or incomplete because Mr. Farrell is not the true and/or sole inventor of the '150, '658, and '622 Patents. Discovery is ongoing and Hamilton Beach reserves the right to supplement such assertions of improper inventorship and/or derivation under 35 U.S.C. § 102(f).

E. Priority of Invention References Under Section 102(g)

To the extent the inventions identified in the patents, publications, systems, and other prior art to the Patents-in-Suit identified in these Invalidity Contentions were conceived by

another and diligently reduced to practice before the alleged conception and reduction to practice of the Asserted Claims of the Patents-in-Suit, Hamilton Beach alleges that such prior art inventions invalidate the Plaintiffs' Patents-in-Suit under 35 U.S.C. § 102(g).

F. Invalidity Charts

Each Asserted Claim is anticipated and/or rendered obvious by prior art. Hamilton Beach has provided the accompanying exemplary charts for the Patents-in-Suit as listed in the table below. Individual claim charts illustrate where each element of each Asserted Claim can be found in each item of the listed prior art. To the extent that a claim chart was not provided for any of the references identified above, such references render certain limitations of the Asserted Claims obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references for which a claim chart has been provided, for the reasons explained in detail in Section III.G. As stated above and herein, Hamilton Beach reserves the right to supplement the charts, and the table below, as appropriate.

To the extent that the Court finds that a reference does not expressly disclose certain limitations in the Asserted Claims, such limitations would have been inherent and/or obvious. By mapping the claim language of the Patents-in-Suit to the references, Hamilton Beach does not imply or admit that the claim language satisfies Section 112 of the Patent Act or that the claim language has patentable weight.

Citations from the listed references are not a ratification or acceptance of the manner in which Plaintiffs apply particular claim elements to the features and functions of the accused instrumentalities. The citations are instead intended to demonstrate that, if certain claim elements are applied against the prior art in the same manner as Plaintiffs apply them in their Final Infringement Contentions, then certain prior art discloses those claim elements to the same

V. ACCOMPANYING DOCUMENT PRODUCTION

Hamilton Beach has produced invalidating prior art references, at least as part of the production bearing Bates ranges HBBF0001337-1698 and will be supplemented in view of these Invalidity Contentions. These prior art references and other evidence are being produced in support of the accompanying invalidity claim charts. Hamilton Beach's search for prior art references, additional documentation, and/or corroborating evidence is ongoing. Accordingly, Hamilton Beach reserves the right to continue to supplement its production as Hamilton Beach obtains additional prior art references, documentation, and/or corroborating evidence concerning invalidity during the course of discovery.

Dated: February 12, 2018

Respectfully submitted,

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*Attorneys for Defendant Hamilton Beach
Brands, Inc.*

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41 (CFC)
CONSOLIDATED

**Defendants' Opposition to Plaintiffs' Motion in Limine No. 3 To Exclude Untimely
Invalidity and Non-Infringement Arguments**

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Dated: April 2, 2019

Counsel for Defendants

Plaintiffs’ ***Fourth***¹ motion *in limine*, seeking to exclude certain non-infringement and invalidity defenses, should be denied because (1) it is not supported by the record in this case and (2) Plaintiffs fail to show any prejudice.² Plaintiffs do not contest that the non-infringement defenses complained of in their Motion were set forth in detail in Defendants’ expert report served in September 2018, because they all were.³ Plaintiffs also said nothing through the expert discovery, and, except for a mention in one of their replies regarding the on-sale defense, Plaintiffs also failed to note these issues during summary judgment and *Daubert* briefing, wherein the defenses were discussed and dissected. Moreover, Defendants’ on-sale bar defense is pled with specificity in its Answer and Counterclaims and set forth in its final invalidity contentions, now supported by additional evidence later produced by Plaintiffs during discovery. Now, Plaintiffs file their extrajudicial motion *in limine* to complain about interrogatory responses, ignoring the entire case record—including its own knowledge and statements from earlier in the case, as well as their own document production and witness testimony. Plaintiffs’ motion should be denied.

a. Divided infringement: Plaintiffs have been aware of Defendants’ divided infringement theory at least since the Court’s claim construction hearing in October 2017. ***Plaintiffs*** told the Court that Defendants were using their construction of “providing a mixing machine” “to create a ***divided***

¹ Plaintiffs filed their first motion *in limine* as D.I. 172, and now submit, over Defendants’ objection, three ***additional*** motions *in limine*. Defendants ask that Plaintiffs’ motion be stricken.

² In each case relied upon by Plaintiffs, the evidence was not disclosed during fact discovery, and thus true ambush resulted. In *Carrier*, the defendants withheld information about the accused products and whether they were sold as a “system.” See *Carrier Corp. v. Goodman Glob., Inc.*, 64 F. Supp. 3d 602, 614 (D. Del. 2014). The cited *Praxair* case merely pertained to undisclosed prior art references. *Praxair, Inc. v. ATMI, Inc.*, 445 F. Supp. 2d 460, 469 (D. Del. 2006). Unlike *Vehicle IP*, the underlying factual bases of Defendants’ non-infringement arguments have been fully “vetted through fact discovery.” *Vehicle IP, LLC v. Werner Enters., Inc.*, No. 10-503-SLR, D.I. 209 *1 (D. Del. Sept. 20, 2013). Plaintiffs have not met the high burden of precluding defenses at trial. See *Bayer HealthCare LLC v. Baxalta Inc.*, 16-CV-1122-RGA, 2019 WL 297039, at *1 (D. Del. Jan. 22, 2019) (“[T]he exclusion of critical evidence is an ‘extreme’ sanction, not normally to be imposed absent a showing of willful deception or ‘flagrant disregard’ of a court order”) (citing *Konstantopoulos v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir. 1997)).

³ Ex. A at ¶¶ 43-44 (failure of proof for “grinding”/“shaving”), 71-79 (“unrestrained” and “sufficient mass”), 80-81 (DOE), 89 (DOE), 92-94 (divided infringement).

infringement argument, because [] the consumer uses the blending machine but the blending machine is provided by the retail stores.” Ex. B at 39:14-25. The Court then adopted Defendants’ construction, D.I. 83 ¶ 3 & n.4, thus Defendants have pursued their divided infringement argument. Moreover, Plaintiffs’ final infringement contentions did not allege *who* performs the asserted method claims in the ’658 and ’662 patents. Ex. C. It was not until Dr. Maynes’ Opening Report that Plaintiffs accused *consumers* of performing the method steps. Defendants’ Motion *in Limine* No. 1, Ex. E at ¶¶ 73, 91, 126. Before service of Plaintiffs’ opening expert report, Plaintiffs had never specifically alleged the accused acts that created the joint (divided) infringement at issue in this case.

b. “Unrestrained” Splash Shield and “Sufficient Mass” Limitations: Defendants raised their non-infringement positions for the “unrestrained” and “sufficient mass” limitations during fact discovery. Both Messrs. Williams and Branson, who Defendants identified as most knowledgeable about the factual basis underlying Defendants’ non-infringement opinions (Pls.’ Ex. A at 13), discussed the underlying basis for Defendants’ “unrestrained” and “sufficient mass” non-infringement positions. Ex. D at 121:25-122:19 (unrestrained), 126:20-127:7 (friction), 149:20-150:12 (sufficient mass); Ex. E at 108:13-25 (unrestrained); 112:3-10 (friction)). Defendants also summarized their position in a letter sent to Plaintiffs on **January 30, 2017**. Ex. F at 2. Defendants also objected to Plaintiffs’ Interrogatory No. 7, explaining that the request was premature to the extent it called for expert testimony. Pls.’ Ex. A at 14. Plaintiffs did not move to compel and Defendants’ expert subsequently provided opinions regarding these non-infringement defenses in response to Plaintiffs’ expert setting forth specific infringement allegations and evidence. *See* Defendants Motion *in Limine* No. 1, Ex. E at ¶¶ 111, 113 (claim chart); Ex. A at ¶¶ 71-79). It would be wholly unfair to allow Plaintiffs to lie in wait, in view of that objection and their knowledge of the other defenses, and move to preclude defenses at trial more than a year later.

c. “Visual” Evidence of Grinding or Shaving: Defendants’ non-infringement defenses

pertaining to the “grinding” and “shaving” limitations of the ’377 patent have been heavily litigated in this case. *See, e.g.*, D.I. 63 ; D.I. 83. Plaintiffs do not complain that they were unaware of these defenses, but instead complain that Defendants, prior to summary judgment briefing, never required “visual evidence” of infringement. Yet, Defendants’ position is merely that Plaintiffs failed to provide **any** evidence of grinding or shaving, visual or otherwise. *See* D.I. 178 at 5-8 (noting Plaintiffs’ failure of proof). This is not a new theory and Plaintiffs maintain the burden to prove infringement. Ex. G at 31:5-6.

d. On-Sale Bar: In its counterclaims , Hamilton Beach asserted with specificity that the ’662, ’658 and ’150 patents are invalid and unenforceable because the claimed subject matter was on sale one year before the earliest effective filing date. D.I. 10 at ¶ 51, 71, 74. Plaintiffs acknowledged the on-sale defense, and specifically Defendants’ contention that there was a prior sale to QuikTrip, in its own summary judgment brief. D.I. 170 at 12, 39-40. In discovery conducted after the deadline for invalidity contentions, Defendants finally had the opportunity to question Mr. Voges, Plaintiffs’ Rule 30(b)(6) deponent, and Mr. Farrell about f’real’s first offers for sale to QuikTrip in 2001-2002. Ex. H at 101:5-104:7; Ex. I at 108:24-113:18); Ex. J at ¶ 15. The record shows Plaintiffs had sufficient knowledge of the on-sale bar defense.

e. Doctrine of Equivalents (“DOE”): Plaintiffs do not specify which DOE “arguments” they are seeking to exclude. Moreover, Defendants’ estoppel arguments are legal issues supported by the prosecution history of the asserted patents. *See* Defs.’ Mot. *in Limine* No. 2. Further, Plaintiffs—even to this day—have not provided notice of their DOE positions regarding “function, way, result” sufficient to allow Defendants to respond in kind. *Id.*

f. Prejudice: Plaintiffs have also failed to point to any prejudice that would result if the Court permits Defendants’ arguments, and failed to provide any examples of additional discovery that they would have taken. Plaintiffs only claim “surprise,” but they cannot be “surprised” by theories that they knew long ago, or that originated from their own documents. For the foregoing reasons, Plaintiffs’ Motion should be denied.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS
CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and HERSHEY
CREAMERY COMPANY

Defendants.

C.A. No. 16-41-CFC

CONSOLIDATED

**DECLARATION OF FRANCIS DIGIOVANNI IN SUPPORT OF
DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION *IN LIMINE* NO. 3**

¶

I, Francis DiGiovanni, declare:

1. I am a licensed attorney with the law firm of Drinker Biddle & Reath LLP, counsel for defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively "Defendants") in the above-captioned action. I am admitted to practice in this District, I am over 18 years of age, and have personal knowledge of the matters stated in this declaration and would testify truthfully to them if called upon to do so. I submit this declaration in support of Defendants' Opposition to Plaintiffs' Motion *in Limine* No. 3, filed contemporaneously herewith.

2. Attached hereto as Exhibit A is a true and correct copy of the Rebuttal Expert Report of Alexander Slocum.

3. Attached hereto as Exhibit B is a true and correct copy of excerpts of the transcript from the Markman Hearing in this action dated October 17, 2017.

4. Attached hereto as Exhibit C is a true and correct copy of Plaintiffs' Final Infringement Contentions for Defendants.

5. Attached hereto as Exhibit D is a true and correct copy of excerpts of the deposition transcript of Brian P. Williams, taken in this action.

6. Attached hereto as Exhibit E is a true and correct copy of excerpts of the deposition transcript of Benjamin H. Branson, III, taken in this action.

7. Attached hereto as Exhibit F is a true and correct copy of a letter from William S. Foster to Guy Chambers dated January 30, 2017.

8. Attached hereto as Exhibit G is a true and correct copy of excerpts of the transcript from the hearing dated March 11, 2019 in *Orexo AB et al. v. Actavis Elizabeth LLC, et al.*, C.A. No. 17-205 (CFC).

9. Attached hereto as Exhibit H is a true and correct copy of excerpts of the deposition transcript of Jens Voges, taken in this action.

10. Attached hereto as Exhibit I is a true and correct copy of excerpts of the deposition transcript of James Farrell, taken in this action.

11. Attached hereto as Exhibit J is a true and correct copy of Defendant Hamilton Beach Brands, Inc.'s Notice of Rule 30(b)(6) Deposition of Plaintiff f'real Foods, LLC.

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed this 2nd day of April, 2019, in Wilmington, Delaware.

/s/ Francis DiGiovanni

Francis DiGiovanni, Esq.

francis.digiovanni@dbr.com

DRINKER BIDDLE & REATH LLP

EXHIBIT A

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Rebuttal Expert Report of Alexander H. Slocum, Ph.D.

Freeal Foods, LLC v. Hamilton Beach Brands, Inc., No. 16-41 (GMS) Consolidated (D.
Del.)

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Signed:

Dated: September 24, 2018

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I. INTRODUCTION

1. My name is Alexander Slocum. I have been retained by Defendants to analyze and to respond to the opinions set forth in Dr. Maynes' opening report, specifically whether Hamilton Beach's Accused Products infringe any of claims 1-4, 6, 9, 11-14, 18-22, 25, and 27 of U.S. Patent No. 5,803,377 ("the '377 patent"); claims 15, 20, and 22 of U.S. Patent No. 7,144,150 ("the '150 patent"); claims 1 and 5-11 of U.S. Patent No. 7,520,658 ("the '658 patent"); and claim 21 of U.S. Patent No. 7,520,662 ("the '662 patent"). These Accused Products include the IMI2000, the BIC2000, the MIC2000, and the BIC3000-DQ (collectively, "Accused Products"). In addition, I was asked to provide my opinion regarding other issues raised by Dr. Maynes' opening report, such as whether there are certain alternatives to the Accused Products that do not practice the patents asserted by f'real in this case.
2. As noted in my opening report, I expect to testify at trial with respect to the matters addressed by experts testifying on behalf of the Plaintiffs, such as Dr. Maynes, or on other matters relevant to this case, if asked to do so by the Court or by the parties' counsel.
3. To ensure that my opinions are complete and accurate, I reserve the right to supplement or amend this report if additional facts and information that affect my opinions become available. Such information may include, for example, materials produced in this case, and information and documents relevant to this case that Plaintiffs have not yet disclosed. I may also supplement or amend my report or opinions in response to additional discovery or other events and may rebut any additional expert reports submitted by Plaintiffs.

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4. I am being compensated for the time that I spend working on this case at an hourly rate of \$650, including reimbursement for expenses incurred as part of my work. My compensation is not contingent upon my testimony nor on the outcome of the case, and I have no personal nor financial interest in the outcome of the case.

II. SUMMARY OF CONCLUSIONS

5. I conclude that claims 1-4, 6, 9, 11-14, 18-22, 25, and 27 of the '377 patent, claims 15, 20, and 22 of the '150 patent, claims 1 and 5-11 of the '658 patent, and claim 21 of the '662 patent are not infringed by any of the Hamilton Beach Accused Products. Moreover, there is no technical basis for asserting Hamilton Beach copied f'real's products and instead Hamilton Beach followed standard development practices to independently come up with a fundamentally different non-infringing approach for a self-rinsing blender/mixer. In addition, Defendants' analysis of the asserted patents prior to completing development of the Accused Products was technically sound and they had a reasonable technical basis for determining that the Accused Products did not practice any valid asserted patent. Finally, f'real's pre-packaged cups are not a "functional unit" with the blenders the practice the '150 patent family.

III. QUALIFICATIONS

6. My qualifications for presenting the opinions in this report were provided in Section III of my invalidity expert report.
7. A copy of my curriculum vitae and the other required disclosures were included as Exhibits 1 and 2 to my opening expert report.

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IV. INFORMATION CONSIDERED

8. In preparation for this report and for expert testimony that I may be called upon to provide, I have considered and may rely on documents identified in this report or those referenced in the exhibits attached to this report. As with my opening report, I considered the asserted patents, prosecution histories of the asserted patents, and the Court's claim construction order, among other materials. I have also considered Dr. Maynes' opening report. The materials I have considered are listed in Exhibit 1 to this report. In addition, I reviewed my opening report and considered the material cited in Exhibit 3 of that report. My opinions are based on these sources of information, as well as my education, training, and experience.
9. In testifying, I may use some or all of the information referenced above, additional information identified in discovery, as well as any materials relied upon by Plaintiffs' experts, to support or summarize my opinions. In addition, I may prepare summaries and demonstrative exhibits to assist with my presentation of testimony to the Court.

V. APPLICABLE LEGAL PRINCIPLES

A. Perspective of One of Ordinary Skill in the Art

10. As I noted in Paragraph 17 of my opening report, it is my understanding that a patent is to be understood from the perspective of a hypothetical "person of ordinary skill in the art" ("POSITA"). I have been instructed to consider all the issues addressed in this report from the perspective of a person of ordinary skill in the art.

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B. Direct Infringement/Preponderance of Evidence Standard

11. It is my understanding that to prove infringement, Plaintiffs must establish by a “preponderance of evidence” (*i.e.* more likely than not) that each and every claim limitation recited in a patent claim is found in an accused device using the Court’s claim constructions. If the accused device does not contain one or more of the limitations recited in the claim, then that accused device does not infringe that claim. In reaching my opinions discussed herein, I have used the “preponderance of evidence” standard throughout this report.
12. I understand that a direct infringer is one person that makes, uses, offers to sell, sells, or imports the products or processes that infringe a valid patent claim. An indirect infringer is one who induces another to directly infringe or contributes to another’s direct infringement. I understand that Plaintiffs must identify with specificity the one person alleged to be the direct infringer and must show that the alleged meeting of all claim limitations is attributable to such one person as part of the burden of proving that actual direct infringement has occurred. I understand that a party can be liable for direct infringement of a method claim even if the performance of the method steps is divided among different persons. But the alleged direct infringer can be held responsible for the acts of a different person only if (1) the accused entity directs or controls the other’s performance of the method step(s), or (2) the accused entity and the other are part of a joint enterprise. The first test can be satisfied only if there is an agency relationship between the parties or when one party is contractually obligated to the other to perform the steps.

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13. I understand that a determination of patent infringement requires two steps. In the first step, the Court must construe the claim language to determine, as a matter of law, the proper scope and meaning of each claim limitation. In the second step, the construed claim is compared to the Accused Products by the fact finder. If each limitation of a claim, as construed by the Court, is found in the accused product or process, and in the arrangement required by the claim, then that product or process infringes the claim.
14. In this case, I understand that the Court has construed some of the claim limitations and that the parties have agreed to the claim constructions of other claim limitations. Where the Court has not construed a claim limitation, and the parties have not otherwise agreed to a construction for a claim limitation, I understand that I should use the plain and ordinary meaning of a claim limitation as understood by a POSITA in the context of the intrinsic record of the patent, which constitutes the language of the claims, the specification, and the prosecution history.

C. Indirect Infringement

15. I understand that an accused party can be liable of indirect infringement for either inducing or contributing to the direct infringement of an asserted patent by another party not named in the lawsuit. I also understand that Plaintiffs must prove a corresponding act of direct infringement in order to prove an accusation of indirect infringement.
16. I understand that for an indirect infringer to have induced the infringement of others there must be a showing of actual direct infringement, and a showing that the alleged inducer knew of the patent, knowingly induced the infringement, and

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possessed a specific intent to encourage another one person's infringement of the patent.

17. I understand that for an indirect infringer to have contributed to the infringement of others there must be both a showing of actual direct infringement, and a showing that the products or processes alleged to contribute to such infringement can have no other substantial non-infringing use.

18. Concerning non-infringing uses, it is my understanding that providing a device that is suitable for substantial non-infringing use is not contributory infringement even if the person receiving or buying the article uses it in an infringing way. A device capable of substantial non-infringing use is something that has uses that are not occasional, farfetched, impractical, experimental, or hypothetical.

19. I understand that the availability of acceptable non-infringing alternatives at the time of alleged infringement is a consideration taken into account for purposes of determining damages at the hypothetical negotiation. I also understand that an alternative may still be considered available where the alternative was not on the market.

D. Means-Plus-Function Limitations

20. I understand for an Accused Product to satisfy a means-plus-function limitation, the Accused Product must have structure that (1) performs the claimed function and (2) is a corresponding structure described in the specification, and equivalents thereof, for performing the claimed function.

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E. Doctrine of Equivalents

21. I understand that, if a limitation of a claim is not literally found in the accused product or process, the claim may still be infringed under the theory of the Doctrine of Equivalents (or “DOE”). I understand that under DOE there can be infringement of a patent claim if there is only an insubstantial difference between each of the components of the accused product or process and each of the limitations of the patent claim. I also understand that one way to tell if something is equivalent is to determine if it performs substantially the same function, in substantially the same way, to achieve substantially the same result.
22. I further understand that DOE cannot be relied upon to (i) enlarge the literal scope of the claims to include subject matter that was disclosed in the specification but not literally claimed; (ii) to enlarge the literal scope of the claims to include subject matter disclaimed during prosecution of the underlying application; (iii) to enlarge the literal scope of the claims to include subject matter that was foreseeable at the time of a narrowing amendment to the claims; (iv) to effectively eliminate a claim limitation in its entirety; or (v) to expand the claims so far as to read on the prior art. Finally, I also understand that a DOE analysis must be supported by specific evidence, and that a conclusory statement alleging that an accused product or process satisfies a test for DOE is insufficient.

F. Plain and Ordinary Meaning

23. I understand that if the Court has not construed a claim, and the parties have not otherwise agreed to a claim construction, then I should use the “plain and ordinary” meaning of the claim limitation when evaluating infringement.

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24. I understand that the plain and ordinary meaning of a claim limitation is the meaning as understood by a POSITA in view of intrinsic evidence consisting of the claim language, the specification, and the prosecution history. I also understand that other extrinsic evidence outside of the patent, such as dictionaries, may also be consulted for determining the plain and ordinary meaning, but this extrinsic evidence should be given less weight than the intrinsic evidence. In addition, I understand that if the extrinsic evidence provides more than one definition for the term, the intrinsic evidence must be consulted to identify which of the different possible definitions is most consistent with the use of the claim limitation in the patent.

G. Patent Claims

25. A patent may include two types of patent claims: independent claims and dependent claims. An “independent claim” sets forth all of the elements or limitations that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers.
26. A “dependent claim” does not itself recite all of the elements of the claim but incorporates the elements of one or more other claims by reference in addition to reciting additional elements. In this way, the claim “depends” on another claim. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claim(s) to which it refers.
27. I understand that the Accused Products cannot infringe a dependent claim if the Accused Products do not infringe the corresponding independent claim or any intervening claim from which such dependent claim depends.

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VI. ASSERTED PATENTS

A. U.S. Patent No. 5,803,377

28. At paragraph 27 of my opening report, I summarized the '377 patent. In the specification and during prosecution of the '377 patent, the Applicant stressed that the claimed frozen substance was different than ice cream and argued that "[a]t no point in the Hamilton Beach reference is the step of grinding a block of frozen substance into frozen particles described or suggested." HBBF0050335. The Applicant also argued that "[i]t can be easily appreciated by those both skilled and unskilled in the art that simply softening traditional ice cream using a drink mixer will not turn the ice cream into a frozen particulate substance." Accordingly, the Applicant distinguished the claims by including a blade with grinding/shaving and aeration functions such that the blade causes "air to be incorporated/whipped into the ground frozen substance." HBBF0050546. The '377 patent is not limited to a self-serve blender as it specifically discloses a crew serve application.

B. '150 Patent Family (U.S. Patent Nos. 7,144, 150, 7,520,658, and 7,520,662).

29. As noted in my opening report, each of the '150 patent, the '658 patent, and the '662 patent all claim priority to the '622 provisional. In addition, each of the '658 patent and the '662 patent claim priority to the '150 patent such that all three patents have a similar disclosure and I refer to them collectively as the '150 patent family. I discuss the common disclosure of the '150 patent family at Paragraph 28 of my opening report. In addition, Dr. Maynes and Plaintiffs do not believe the '150 patent family is not directed specifically to a self-serve blender/mixer as they

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accuse a number of Hamilton Beach's products that are used solely in a crew-serve setting of infringing these patents.

30. At Paragraphs 29 and 40 of his report, I believe Dr. Maynes is trying to state that the cup must be removed from the machine by the consumer and then the machine commences the rinse cycle. However, the Applicant noted during the prosecution of the '150 patent family that the cup can be in the machine while the rinse cycle commences, whereas this is simply not possible under any circumstances with the Accused Products. HBBF0051111. Most importantly, a machine of the '150 patent family prevents fluid from dripping onto the cup holder, which is achieved by a pair of automatically closing doors that shield the access location having the cup and cup holder from the rinse chamber. HBBF0051111-12. This is the only embodiment disclosed by the '150 patent family. I have inspected an f'real machine and operated it at the Laverdes Market in the MIT Student Center in Cambridge, MA and I can attest to the fact that it works like the machine in the '150 patent family (as admitted by Plaintiffs and Dr. Maynes) where doors close to shield/isolate the rinse chamber from the cup holder and cup, and the user (me) does not have to remove the cup before rinsing occurs.

VII. MEANING OF CLAIM TERMS

31. Just as I did in my opening report, I used the Court's claim interpretations as set forth in its order dated November 29, 2017 (Document 83), and the meanings agreed upon by the parties for any claim terms in the Third Revised Final Joint Claim Construction Charts dated October 12, 2017 (Document 76) in formulating my opinions set forth in this report. For any claim term that was not construed by

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the Court or had an agreed-upon meeting, I used the plain and ordinary meaning for such terms in view of a POSITA's understanding based on the context provided by the patent.

VIII. LEVEL OF ORDINARY SKILL IN THE ART

32. In my prior report, I provided my opinion that, as of the priority date of the various patents, a person of ordinary skill in the art ("POSITA") of the asserted patents would be an engineer with at least an undergraduate degree in mechanical engineering or related discipline and at least three years of professional or research experience in the design of consumer or medical products that utilize fluid systems. Dr. Maynes agreed with my opinion regarding who qualifies as a POSITA at Paragraph 15 of his report.

IX. EVALUATION OF DR. MAYNES' INFRINGEMENT ASSERTIONS

33. A review of Dr. Maynes' report suggests that he performed no independent testing of the Accused Products. While he may have personally inspected the operation of the MIC2000 and observed the operation of BIC3000-DQ by video, Dr. Maynes cites to almost no technical documentation and instead relies mostly upon the deposition testimony of Hamilton Beach employees and characterizations of the Accused Products in email. The only "testing" cited by Dr. Maynes in his report is unreliable testing conducted by f'real that included a number of issues that reflect inaccuracies such as how "overrun" was measured and how the MIC2000 was operated. Thus, it does not appear that Dr. Maynes' opinions are (1) based on sufficient facts or data or (2) the product of reliable principles and methods or applied such principles to technical aspects of the Accused Products.

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B. '377 Patent

34. Plaintiffs are asserting claims 1-4, 6, 9, 11-14, 18-22, 25, and 27 of the '377 patent. All of the claims of the '377 patent include either “aeration means . . . causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser” or “aeration elements.” The parties agreed that these are means-plus-function limitations. The Court construed both of these means-plus-function limitations identically to have the structure “curved, wave-like structure(s) on a rotatable blade with a slim cross-sectional profile” for “causing air to be incorporated into a mixture.”
35. Each of the independent claims 1, 11, and 27 recite “making frozen drinks from a frozen substance frozen into a cup.” The claims require incorporating air into the mixture of liquid and the frozen substance frozen into a cup. The Accused Products are not sold with “a frozen substance frozen into a cup.” For the IMI2000, BIC2000, and BIC3000-DQ, the operator adds ingredients to a cup which is then inserted into the machine for blending. Only the MIC2000 sold to Hershey Creamery is used with a pre-packaged cup. Consequently, Plaintiffs and Dr. Maynes only assert the use of the MIC2000 with the Hershey Creamery “milkshake” at Paragraphs 112 and 113 of his report.
36. At Paragraph 112 of his report, Dr. Maynes relies on the testing performed by Mr. Jens Voges, a former f^rreal employee who left the company in 2016 and who still has a relationship with the company. Dr. Maynes stated, “The tests were conducted in a scientifically-valid manner and their results make sense. For that reason, I am adopting the scientific aeration tests conducted by f^rreal as part of my expert report

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testimony.” Under accepted scientific principles, however, Dr. Maynes would have ideally conducted independent testing rather than merely accepting f̄real’s conclusions at face value because he would have assumed f̄real set out in a biased manner to prove infringement by the MIC2000. At the very least, Dr. Maynes should not have blindly accepted the results of testing that he did not personally supervise, witness, or have any part of writing the protocol for or providing guidance. Mr. Voges acknowledged issues with his testing as the entire results of the first batch of testing were thrown out because the cups overflowed. Furthermore, Mr. Voges also observed that “[a]bout ¼ to 1/3 of the product in the cup was not blended (on the bottom and on the sides), because the blending blade does not have a moving piece. The product that was actually blended, was thin, more like a beverage, not a milkshake.” In my testing, I only experienced that issue when the product was melted and then refrozen, which is not the product that Hershey Creamery sells as melting the ice cream changes its properties. Waite 247. At a minimum, Dr. Maynes should have recognized these issues as red flags that warranted his own testing to see if he could reproduce at least some of the results obtained by f̄real.

37. I find that there a number of other problems with Dr. Maynes’ reliance on f̄real’s flawed testing procedure because Mr. Voges used a process where he interrupts the up and down motions of the rotating blade (he refers to these as cycles) and takes the cup out and attempts to quickly freeze it by packing with dry ice, and then when frozen, he pours water in and then empties the water to measure the volume of water and determine the amount of overrun as a proxy for measuring aeration. However,

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it's not even clear that the starting assumptions of f'real's biased testing are accurate as Hershey Creamery's milkshake product is more like 20% overrun. HCC_025576. Furthermore, f'real took no pictures or provided other corroborating data on the cups or of the liquid poured into/out of the cups, so there is no way to determine the efficacy of their methods. f'real also failed to indicate when and where the tests were performed or how the Hershey cups were transported to that location (could they have melted along the way? any expansion resulting from transportation to the West Coast?). The amount of overrun variation between the steps is questionable for how does the rotating blade remove air and then add it back in? No plausible explanation for why this very interesting phenomenon might be so, and the possibility that their method, for which they provided no pictures or other visual documentation, might have created conditions that they then report erroneously as overrun, which is the air incorporated into ice cream during the freezing process, and is not necessarily reflective of the aeration/whipping described in the '377 patent and its prosecution (*i.e.*, incorporating air into the mixture to add volume and reconstitute the milkshake consistency). These are all questions that would be extremely valuable to have answered in connection with this report, which I understand was not disclosed to Hamilton Beach until Dr. Maynes' report. Dr. Maynes, as an academic, should himself have been very interested in this very strange supposed aeration process behavior and thus asked to personally observe the experiment in real time and report (with pictures) on the actual efficacy of the experiment.

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38. As noted above, the Court said the function of the aeration means is “causing air to be incorporated into a mixture.” During prosecution of the ’377 patent, the Applicant stated in an argument with the header *Air Bubbles In A Finished Blender-Type Or Tomlinson Milkshake May Occur Without Whipping* that:

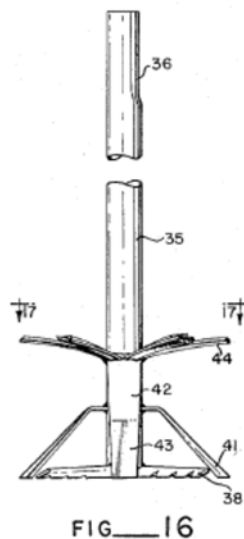
Ice cream is composed of many very small air cells, called overrun, frozen into place during the ice cream freezing process. The process of grinding or blending frozen ice cream ruptures these air cells, and much of this entrapped air escapes, causing the volume of the frozen drink to actually decrease. A portion of this escaping air will often coalesce into larger bubbles which will float up and may remain at or near the surface of the finished drink if they are not completely destroyed by the aggressive action of the machine, but much of the overrun will escape to the atmosphere. This fact can be demonstrated by placing one quart (32 fl. oz.) of ice cream, such as Edy's Grand Ice Cream, and one pint (16 fl. oz.) of whole milk into a conventional home blender and making a “milkshake.” The finished volume of the milkshake will be less than the 48 fl. oz. sum of the two starting ingredients due to the escape of the overrun from the ice cream. This situation would occur in a home blender and in Tomlinson's machine. Without the added step of “whipping air into the mixture of the liquid and ground frozen particular substance,” the frozen beverage will remain at this reduced finished volume (possible still with some residual air bubbles remaining from the overrun in the ice cream), and will be served up as a finished “milkshake” even though it has not been whipped. The Applicant's method adds a whipping step to incorporate air into the mixture of the liquid and ground frozen particulate substance in order to increase the finished drink's volume above that which is attained without this whipping step.

HBBF0050365-66 (emphases added).

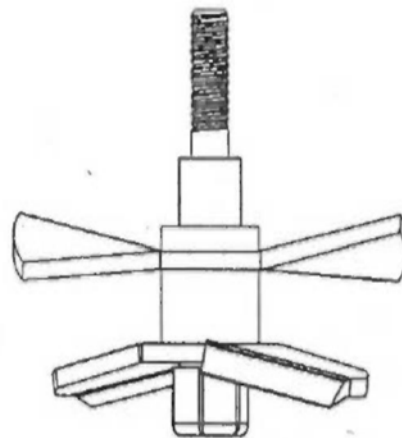
39. Like Tomlinson, the MIC2000 uses a multi-blade configuration (see below images from Dr. Maynes' report) and the Hershey Creamery's milkshake is ice cream that is unlike the claimed frozen substance. Even under f'real's testing, the Hershey Creamery milkshake's initial overrun (before any action taken by the machine) was measured as around 34% while the ’377 patent describes the frozen substance as

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differing from ice cream “because ice cream, by definition, contains air which is incorporated during freezing. For instance, the ice cream typically used in old-fashioned scooped type milkshakes typically contains approximately 45% air by volume.” In view of this context provided by the ’377 patent specification and prosecution history, a POSITA would understand that the plain meaning of the claimed frozen substance would exclude Hershey Creamery’s product with 34% overrun. In fact, F’real asserts Hershey Creamery’s product as inferior for containing such overrun, which begs the question why would there be a need to aerate a product that already has air unlike the ’377 patent’s frozen substance. F’REAL_000218-19. As a starting matter, the MIC2000 used with Hershey Creamery’s milkshake does not infringe any asserted claim of the ’377 patent because Hershey Creamery does not sell the claimed frozen substance.



Tomlinson



Accused MIC2000

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40. Before turning my attention to the report of my own testing that I personally conducted and documented (Exhibit 2), I will discuss whether the MIC2000 blade has a “slim cross-sectional profile.” Dr. Maynes does not even give a measurement of the blade but instead refers to drawings not to scale from U.S. Patent No. 3,147,958 to Stiffer and U.S. Patent No. 3,295,997 to Tomlinson at Paragraph 111 of his report. Dr. Maynes opines that Tomlinson “has a complicated assembly of multiple blades that assumes a wider cross-sectional profile. Again, Hamilton Beach avoided the wider blade option of the prior art and adopted f’real’s approach of using a blade with a thin cross-sectional profile.” But the MIC2000 uses Tomlinson’s multiple-blade approach “that assumes a wider cross-sectional profile.” In addition, Dr. Maynes argues that the MIC2000 does not use sharp bends that “protrude widely out of the plane where the blade is attached to the rotatable mixing element” shown in Stiffer. However, the top blade of the MIC2000 is twisted to greatly increase the thickness of its cross-section profile as in Stiffer. When asked if either blade of the MIC2000 had a slim cross-section profile, Ernie Pryor (a Hamilton Beach engineer who worked on the MIC2000) correctly observed that:

The bend -- the twists in the blades don't make them have a thin profile. When they're flat and -- when they're flat, they have a thinner profile than with the twist, and then the thickness of the blade clearly makes them -- also affects the profile. My description of profile is the resistance to the fluid as it's moving through the fluid.

Pryor 74-76. As discussed below, the cup mixed in the MIC2000 spins without the gripping fingers of the cup holder due to the high drag created by the relatively thick cross-sectional profile of the MIC2000 blades. Thus, the MIC2000 used with

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Hershey Creamery's milkshake does not infringe any asserted claim of the '377 patent because the blades of the multi-blade configuration do not have a "slim cross-sectional profile," individually or in combination. For the same reason, the twisted MIC2000 upper blade is not a "curved, wave-like" structure, the pitched configuration has no sinusoidal-like peak/amplitude variation in a disk-like structure and is unlike the triangle wave on a disk structure shown in the sole embodiment in Figs. 10A-C of the '377 patent. Thus, the MIC2000 lacks the corresponding structure of the aeration means/elements and does not infringe any of the asserted claims of the '377 patent.

41. Now turning my attention to the report of my testing, mixing the high overrun Hershey Creamery ice cream-based product with the multi-blade configuration of the MIC2000 resulted in the finished beverage of reduced volume criticized by the Applicant of the '377 patent. These results were achieved with both the product tempered (*i.e.*, softened) at 5° F as intended and with product re-frozen after testing. The re-frozen product has vastly different properties as melted ice cream is no longer ice cream. My test report of Exhibit 2 is part of my report along with the accompanying raw testing data that I am producing as a native Excel spreadsheet.
42. In addition to testing with the pitched upper blade, I performed the testing with a revised straight blade launched in 2015. The performance between the two blades was nearly identical in actually slightly reducing the volume of the finished milkshake. Another indicator of the unreliability of Mr. Voges' test is that he did not include tests with a "straight" blade (Mr. Williams had testified to the existence of the straight blade in 2017) as a control to see if the pitched design was actually

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aerating the Hershey Creamery product. But my tests confirmed the Applicant's arguments in prosecution regarding Tomlinson, and the MIC2000 actually de-aerated the Hershey Creamery milkshake to be about 10% less than the ice cream had at the start. Thus, the MIC2000 used with Hershey Creamery's milkshake does not infringe any asserted claim of the '377 patent because the MIC2000 does not incorporate air into the mixture of Hershey Creamery's milkshake and water.

43. All of the claims of the '377 patent also recite either "grinding means" or "shaving elements." The Court interpreted the structure for both as "sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile." The function of the grinding means is "grinding the frozen substance to form a ground substance." and the function of the shaving elements is "shaving a frozen substance." As stated in my declaration supporting Hamilton Beach's claim construction arguments (Document 65), grinding would create a ground substance that is made up of "small frozen particles" or "frozen particulate." In addition, shaving would mean "to cut off in thin layers or shreds." Given the differing nature of shaving and grinding on a frozen block, it is not clear how that the same structure could do both and Dr. Maynes' report does not elaborate on that point.
44. Other than pointing out the leading edge of the accused lower blade, Dr. Maynes presents no evidence that the MIC2000 blade results in either (1) a ground substance/frozen particulate or (2) thin layers/shreds of frozen substance. He only points to the testimony of Mr. Branson who testified that the sharp edges of the MIC2000 were implemented to cut up mix-ins like chocolate chips and peanut butter cups in the milkshake product. Branson 53-54. Dr. Maynes' citation to Mr.

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Branson's testimony is also misleading since counsel used the word "shave" and Mr. Branson clarified that "I never said shave through. It was designed to cut them into smaller pieces." Hershey Creamery also confirmed the MIC2000 did not grind or shave. HBBF0021797-98. Thus, Dr. Maynes' report has no evidence of grinding and/or shaving Hershey Creamery's milkshake product.

45. Based on my own observation, the Hershey Creamery milkshake product was semi-soft when tempered at 5° F. Looking at the Hershey control program, water is added before lower the rotating blade into the cup and thereby further softening the milkshake product. HBBF0021463 (Row 8--INPUT Motor Profiles). This softened product cannot be ground or shaved. Instead, it is merely mixed. This confirmed by both f'real and my testing where the MIC2000 could not fully mix the refrozen product (which is more like the frozen block of the frozen substance claimed in the '377 patent) as the lower blade could not grind or shave all of the refrozen milkshake product. Once again, the MIC2000 used with Hershey Creamery's milkshake does not infringe any asserted claim of the '377 patent because the MIC2000 does not grind/shave Hershey Creamery's milkshake, which is not a frozen substance as described and claimed by the '377 patent.

46. Claim 3 of the '377 patent recites, in part:

the blade member including first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade member in a fluid, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect.

Claim 14 recites substantially similar matter. Dr. Maynes fails to identify which plane he is talking about at the upper blade of the MIC2000, which has a twisted

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configuration, or what is the “plane” he is talking about. Moreover, his report does not indicate which are the “first regions” of the twisted upper blade of the MIC2000. Finally, Dr. Maynes provides no evidence of “alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect.” Even assuming the MIC2000 mixing blade creates turbulence as stated by Mr. Branson, there is no evidence in Dr. Maynes’ report that it is caused by “alternately high and low pressure zones in the fluid.” Nor does Dr. Maynes link any structure of the MIC2000 to creating these “alternately high and low pressure zones in the fluid.” Dr. Maynes performed no analysis regarding the attributes of the flow created by the MIC2000, so I cannot evaluate his opinion as he does not provide any technical evidence for his opinion. It is not an accepted scientific practice to determine the flow properties by a mere personal inspection of the blade. Given the number of publications regarding turbulence in his C.V., Dr. Maynes would understand how to measure these “alternating high and low pressure zones” but for some reason did not perform any of his own testing. In the absence of any technical evidence regarding the flow properties, and the confirmed absence of aeration/whipping of Hershey Creamery’s ice cream product by the MIC2000, claims 3 and 14 of the ’337 patent are not infringed for this additional reason.

47. Claims 4, 6, 9, 18, 19, 21, 22, 25, and 25¹ recite “control means” that perform a variety of functions. The Court interpreted the corresponding structure to be “a

¹ The control means of claim 9 and 25 were not construed by the Court. I was informed that the Court would not construe more than 15 limitations, as shown in the Court’s claim construction order (Document 83). Because it is my understanding that the Court must construe these “means-

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microprocessor programmed to” the claim function. Dr. Maynes, however, cites to no particular microprocessor in the MIC2000 in the section of his report dealing with the ’377 patent. In Paragraphs 70 and 74 of his report, Dr. Maynes mentions that the MIC2000 has a microprocessor and the only remotely “technical” document cites is U.S. Patent No. 8,807,823 (“the ’823 patent”). Otherwise Dr. Maynes relies on deposition testimony of the named inventors of the ’823 patent and not an analysis of the MIC2000 or its programming. For example, there is no review of the source code for the MIC2000, which I understand that Hamilton Beach offered up for inspection. In addition, there is no analysis of any customized program for the MIC2000, like the program mentioned in the SmartServe operation manual. HBBF0000027. In addition, there is no indication Dr. Maynes relied upon the Service Manual that he listed as considered on page 6 of his report. The Service Manual for the MIC2000 identifies a number of different control boards (each with microprocessors) that individually generate control signal for different operations of the MIC2000. HBBF0037890-975; see also HBBF0000686-777. Because Dr. Maynes fails to identify any particular microprocessor or any programming for the MIC2000, his report lacks sufficient facts to determine whether the MIC2000 includes any of the control means. Dr. Maynes’ cursory opinions are not consistent with accepted scientific principles, especially when the technical information regarding the MIC2000 that would be necessary to perform the acceptable analysis

plus-function” limitations, these claims can no longer be asserted by Plaintiffs. However, I will address them in my report as best I can to rebut Dr. Maynes’ conclusory infringement opinions.

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was available. Accordingly, Dr. Maynes' report makes no showing that any of the claimed "control means" are present in the MIC2000. Therefore, based on Dr. Maynes' opinion, the MIC2000 with Hershey Creamery's ice cream does not infringe the claims 4, 6, 9, 18, 19, 21, 22, and 25 of the '377 patent because Dr. Maynes does not identify any microprocessor or programming corresponding to claim "control means."

48. In addition, claim 6 and 22 recite "the control means responsive to activation of the initiation switch and to output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch." The same control means in claims 6 and 22 is also claimed as providing vertical blade movement signals and blade rotation signals. Moreover, claim 19 recites "control means responsive to activation of the initiation switch and to the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch." Claim 21 recites that the control means that generates both blade rotation control signals and slidable blade shaft movement control signals. The specification of the '377 patent discloses a single microprocessor as the physical structure of control means and the Court agreed.
49. The Service Manual of the MIC2000 indicates that Control Board 1 includes the input from the control panel and the cup in place sensor. HBBF0000695. Control Board 2 is for the linear actuator motor that controls the vertical position of the mixing blade. HBBF0000696. Meanwhile, Control Board 3 outputs control signals

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to the motor that rotates the mixing blade. HBBF0000697. A wiring diagram for these boards relative to the other components of the MIC2000 is also provided. HBBF0000701. However, Dr. Maynes' opinion includes no discussion of these different control boards and whether the different microprocessors are used to receive the input of the control panel and cup in place sensor, control the liner actuator, and control the motor. This lack of analysis is curious because Mr. Branson even testified that there was a separate controller for generating vertical blade positioning control signals in his oft cited deposition. Branson 103. Again, Dr. Maynes' opinion is not based on sufficient facts regarding the MIC2000 and is not product of accepted technical principles. Therefore, based on Dr. Maynes' opinion, the MIC2000 used with Hershey Creamery's ice cream does not infringe the claims 6, 19, and 22, of the '377 patent because no single microprocessor is shown for performing all of the functions.

50. Claims 9 and 25 recite "control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispenser being responsive to the liquid dispensing control signals to dispense liquid into the cup." The MIC2000 includes the Sharp model no. GP2Y0D810Z0F which "is distance measuring sensor unit, composed of an integrated combination of PD (photo diode), IRED (infrared emitting diode) and signal processing circuit." HBBF0010344-52. It only can measure distance, so it is only suitable for sensing the presence of the cup (*i.e.* cup in place sensor) in the configuration used for the MIC2000. A control program for the MIC2000 shows that the water injected during a mixing operation is predetermined by mixing cycle

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that an operator chooses. As the MIC2000 is programmed to use only a single mixing cycle when a user presses the activation button (UI INPUT Profiles), the MIC2000 operates according to stepper motor cycle 1 and the corresponding Universal Motor & Valve Cycle for Each Phase (INPUT Motor Profiles). HBBF0021463. Accordingly, Control Board 1 of the MIC2000 does not output control signals to the water delivery solenoid based on a characteristic of the cup detected by the cup in place sensor. Therefore, the MIC2000 used with Hershey Creamery's ice cream cup does not infringe the claims 9 and 25 of the '377 patent for this additional reason, as well.

51. Claim 13 of the '377 patent recites that "the blade assembly shaving elements and aeration elements are in close vertical proximity to one another." The only mention of this limitation in Dr. Maynes' report is the claim chart at Paragraph 113 of his report. There is no discussion what is "close vertical proximity" but the accused leading sharp edges of the MIC2000 are on a separate lower blade spaced from the pitched upper blade by a bolt with a wider cross-sectional profile than either blade. No POSITA in the relevant technical field of mixing machine design would consider the blades to be in "close vertical proximity." Therefore, the MIC2000 does not infringe the claim 14 of the '377 patent for yet another reason.

C. '662 Patent

52. Plaintiffs assert only method claim 21 of the '662 patent, which recites:

A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing material to be mixed, the vessel including an opening;

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further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.

53. The Court declined to construe the limitation “directing rinsing fluid . . . while isolating the vessel from the rinsing fluid” and held that the limitation should be given its plain and ordinary meaning.
54. Looking at the context provided the ’662 patent, the term “isolating” is not used in the specification. However, the term “isolating” is used in both claim 1 regarding the cup holder and claim 21 regarding the vessel. It is my understanding that the claim terms in the same patent should have the same meaning unless there is evidence that different meanings were intended. But the record of the ’662 patent includes no such evidence.
55. Looking at the specification of the ’662 patent, the sole embodiment has an enclosure 40 including a pair of automatic hinged doors 36 that shield the cup holder 16 and cup 14 from rinsing fluid when the cup 14 is provided to the mixing machine 100 at an access location including the cup holder 16. ’662 Patent at 4:10-22, 5:17-36; Figs, 1A-1B.
56. As noted above, the ’662 patent claims priority to the ’150 patent. Thus, the ’150 patent’s prosecution history is part of the record of the ’662 patent that a POSITA would consider in evaluating the “plain and ordinary” meaning of claim limitations. To overcome the prior art during the prosecution of the ’150 patent, the Applicant

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stressed that embodiment shows that the “rinsing occurs in a rinse chamber that is shielded from the location from which the user retrieves the cup 14 from the cup holder 16. This allows thorough rinsing of the splash shield and/or other components (*e.g.*, the shaft and/or the mixing element) without creating a mess in the portion of the machine that is access by a user preparing a drink.” HBBF0051111-12. My opening expert report cites to prior art showing that the vessel was removed from the access location before rinsing mixing machine components and a POSITA would understand that the foregoing argument was intended to overcome such prior art. Accordingly, the Applicant of the ’662 patent acknowledged that the doors shield the cup holder and the cup received by the holder (*i.e.*, vessel) within the access location from the rinsing fluid.

57. During examination of the ’662 patent, the Examiner understood that “isolating” was commensurate in scope with “shielding” the access location from rinsing fluid by enclosing a rinse chamber with a door in the context of the ’150 patent family’s disclosure.HBBF0050958. Specifically, the Examiner issued a double patenting rejection noting that the ’150 and ’662 patents “both utilize the isolation/shielding from use of a door.” As a result, the Examiner determined that “the patented door to ‘enclose’ is read to define protection of ‘isolation’ by a door of the instant application claims.” The Applicant did not contest this characterization of the scope of isolating, which is consistent with the sole embodiment in the limited disclosure of the ’662 patent.
58. In addition, claim 21 recites “providing a vessel containing material to be mixed, the vessel including an opening; further providing a mixing machine having a

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holder for receiving the vessel.” Looking at the context of the claim language and the other method steps, the method of claim 21 covers isolating the provided vessel that is received by the holder of the mixing machine. If the vessel was removed or separated or removed from the holder prior to directing rinsing fluid onto the splash shield, then there would be no vessel to isolate.

59. That the vessel must be present in the holder at the same time as (*i.e.* while) the directing step occurs is confirmed by how “isolating” is used in claim 1 where the claim recites “further providing a mixing machine having a holder for receiving the vessel at an access location in the mixing machine” and “directing hot rinsing fluid onto the splash shield . . . while isolating the access location from the rinsing fluid.” There is no way to remove the access location from the mixing machine, and thus, it is isolated at the same time rinsing fluid is directed onto the splash shield. The scope of “isolating” as used in claim 1 must be the same as claim 21 given the lack of any evidence that they should be interpreted differently. More importantly, Dr. Maynes cites to no such evidence and, in fact, his report does not discuss how a POSITA would understand the plain and ordinary meaning of the limitation of “directing rinsing fluid . . . while isolating the vessel from the rinsing fluid” in view of the ’662 patent’s intrinsic evidence.
60. That “isolating” does not mean “separating” or “removing” is also confirmed by the other claims of the ’662 patent. Claim 14 recites that “the unshielding step includes separating the splash shield and the vessel,” consistent with the disclosure in the specification.

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61. Accordingly, in view of the context provided by the '662 patent and its intrinsic evidence, a POSITA would understand that the plain and ordinary meaning of the step of “directing rinsing fluid . . . while isolating the vessel from the rinsing fluid” would encompass isolating/shielding the vessel received by the holder from rinsing fluid at the same time as directing rinsing fluid onto the splash shield.
62. There is no disagreement between Dr. Maynes and myself that the Accused Products require that the vessel be removed from the cup holder before directing rinsing fluid onto the splash shield (*i.e.* lid). In the exemplary MIC2000, the vessel must be completely removed from the machine before the directing rinsing fluid onto the lid that covers the vessel opening. The other Accused Products operate in the same manner. Freal recognizes that the lack of an “isolating” capability as a disadvantage and criticizes the Accused Products for not being able to achieve “back-to back blends,” which the Freal machine achieve by completing rinsing while the Freal cup is still in the holder moving to the home position. F’REAL_000218-19 (“Rinse Time”). Accordingly, none of the Accused Products include a vessel provided to the machine and received by a cup holder at the same time rinsing fluid is directed onto the lid. Therefore, none of the Accused Products infringe claim 21 of the '662 patent because they do not perform at least the step of “directing rinsing fluid . . . while isolating the vessel from the rinsing fluid.”
63. Even accepting Dr. Maynes’ reading of the scope of “isolating,” the Accused Products do not infringe claim 21 of the '662 patent. He completely ignores the term “while,” which is commonly understood to mean “at the same time.” In the claim chart at Paragraph 91 of his report, Dr. Maynes asserts, “Since the cup is

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removed before the automatic rinsing, the cup is isolated from the rinsing fluid during the rinsing step.” Based on Dr. Maynes’ assertion, the Accused Products would still infringe claim 21 if the word “isolating” was substituted with the word “removing.” After that change, claim 21 would read “directing rinsing fluid . . . while removing the vessel from the rinsing fluid.” The claim now makes little sense in the context of the ’662 patent as the vessel is not exposed to rinsing fluid and then subsequently removed while directing rinsing fluid onto the splash shield is still occurring. Moreover, there is no dispute that the vessel is completely removed from the Accused Products before directing rinsing fluid onto the lid.

64. But even giving Dr. Maynes the benefit of the doubt that he meant that the vessel is removed from the cup holder and the machine before directing rinsing fluid onto the lid (even though that is not what the claim says), the Accused Products still do not infringe. In the Accused Products, the vessel must be completely removed before rinsing may begin. Other than in the IMI2000, the machine must detect (1) that a vessel is removed from the access location of the machine and (2) that a magnetic interlock must be disengaged and reengaged (via the magnets in the door assembly) prior to rinsing the lid after a mixing operation. In the IMI2000, there is no interlock and rinsing begins after the operator removes the finished beverage and then pushes a button. The step of removing the vessel from any of the Accused Products must be finished before rinsing the lid. Thus, removing the vessel from the Accused Products cannot occur at the same time (*i.e.*, while) rinsing fluid is directed onto the lid. Even under Dr. Maynes’ assumption that “isolating”

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encompasses “removing,” the Accused Products still do not infringe claim 21 of the ’662 Patent.

65. In Paragraph 92, Dr. Maynes’ report is also silent about what in the Accused Products constitutes “substantially the same function, is performed in substantially the same way and achieves substantially the same result as the literal elements of the claim.” This conclusory statement says nothing about how the Accused Products actually supposedly infringe in an equivalent manner. Paragraph 92 cites to no facts or data whatsoever to support any assertion under DOE. As noted above, the Accused Products operate in a substantially different way because the vessel must be completely removed from the machine prior to rinsing.
66. Moreover, claim 21 of the ’662 patent cannot be infringed under DOE because the “directing rinsing fluid . . . while isolating” limitation was added to the ’662 patent by an amendment to claim 1 and adding new claim (which was claim 51 during prosecution). Because this narrowing limitation was added during prosecution, it is my understanding that Plaintiffs cannot assert infringement under the DOE for that limitation. HBBF0050948-52.

D. ’658 Patent

67. Plaintiffs assert claims 1 and 5-11 of the ’658 patent against the Accused Products. Independent claim 1 is directed to a mixing machine and recites:

A mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine comprising:

a holder coupled to the mixing machine, the holder proportioned to receive a vessel; a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;

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a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;

a shaft; and

a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.

68. Claim 1 recites “a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position.” Claim 1 also recites “a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel.” Accordingly, the first position corresponds to a lower portion of the vessel while the second position corresponds to the vessel opening. As shown in Figs. 1 and 4, the splash shield 22 is in the first position resting on the stationary shaft 12. As shown in Fig. 6, the cup 14 is raised by cup holder 16, and the splash shield 22 is raised along the shaft to the second position. The cup 14 is then reciprocated by the cup holder 16 so that the splash shield 22 moves between the first position that corresponds to where the blade 10 is at the lower part of the cup 14 farthest from the opening to the second position. As claimed, the axial movement of the splash

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shield between the first and second positions must correspond to the relative axial movement of the blade and the vessel during mixing.

69. However, the splash shield of the Accused Products never moves “between first and second positions within the vessel.” In the Accused Products, the cup does not move, and the rotating blade moves up and down in the cup while the lid is stationary. By contrast, in the ‘658 patent, it is the cup that moves up and down with the splash shield and the blade rotates without moving up and down. Hence in the Accused Products, the splash shield is not slidable along the shaft to any portion/position within the vessel during mixing as required by claims 1 and 5 of the ‘658 patent since it remains fixed on top of the cup during mixing. Thus, the Accused Products do not infringe claims 1 and 5 of the ‘658 patent for at least this reason.
70. In addition to claim 1, Plaintiffs are also asserting independent claim 6 of the ‘658 patent, which recites:

A method for retaining a vessel in a holder while mixing contents of the vessel, the method comprising the steps of:

providing a vessel containing contents to be mixed, the vessel including an opening;

further providing a mixing machine having a holder on the mixing machine for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, and a shield;

positioning the vessel in the holder; positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening; and

with the vessel positioned in the holder, using a motor to translate at least one of the mixing element and the holder such that the mixing

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element passes through the contents of the vessel, the mass of the splash shield preventing separation of the holder and the vessel during translation.

71. Each of claims 1 and 6 recites an “unrestrained” splash shield and that the splash shield has “sufficient mass” to retain the vessel in the holder during relative translation of the mixing element in the vessel. The parties agreed that the “unrestrained” limitations mean that “without any other mechanical means of restraining the upward sliding movement of the splash shield on the shaft, apart from the mass or weight of the splash shield itself.” The parties agreed that the meaning of the splash shield/shield is a “lid for the cup opening.” Accordingly, any restraint on the lid outside of the weight of the lid itself would result in the product falling outside of the scope of the asserted claims of the ’658 patent.
72. As I noted in Paragraph 52 of my opening report, the disclosure of the ’658 patent is limited to a free-floating splash shield that includes no “any clamps, grips, springs, guide posts, bearings, weights, bushings, or other structure that act on the shield 22 to restrain its motion during mixing.” Dr. Maynes agrees in Paragraph 43 of his report and states:

As noted in the specification of f’real’s self-rinsing blender patents, prior efforts to address this problem, including Neilson’s U.S. Patent No. 5,439,289 (“Neilson patent”), required springs, clamping and/or other mechanisms (‘150 patent, 4:5-9; ‘658 patent, 3:65-4:20). These approaches are explicitly distinguished by f’real’s self-rinsing blender patents. *Id.* Mr. Farrell’s solution was to make the splash shield of sufficient mass when used in conjunction with the cup holder to overcome the upward lifting force of the milkshake (‘150 patent, 4:4-29; ‘658 patent, 4:3-20). In one preferred embodiment, the weighted splash shield is made of stainless steel and weighs approximately 5 lbs. (‘658 patent, 4:26-28).

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I agree that Mr. Farrell's solution was to make the free-floating splash shield of sufficient mass to retain the cup of the holder so that it does not require springs, clamping and/or other mechanisms, and by amending the claims to add the narrowing limitation that the splash shield was "unrestrained," this is how the claims were distinguished over the prior art and thus subsequently allowed. HBBF0050706-12. It is clear in Paragraph 53 of Dr. Maynes' report that f'real's splash shield is not anything other than a singular splash shield that is completely unattached to any other mechanism.

73. There is no dispute that other mechanical forces besides the weight of the respective lids themselves restrain the upward movement of the lids in the Accused Products. In Paragraph 100 of his report Dr. Maynes acknowledges that there are incidental frictional contacts at the bushings and shaft shield that restrain the upward movement of the lid. To minimize the effect such restraining forces on the upward movement of the Accused Products' lids, Dr. Maynes incorrectly asserts that such forces are not "'mechanical means' (e.g., springs, gear assemblies) to hold down the splash shield that the weighted f'real splash shield was designed to avoid." On the contrary, the guide rods supporting the splash shield move in bushings that guide the motion of the rods, and there is sliding contact between the bushings and the rods. The assembly is thus fundamentally a "mechanism" comprised of two single degree of freedom slider joints (each guide rod in its guide bushing is a single degree of freedom slider joint). *See, e.g.,* MYSZKA, D.H., "Machines and Mechanism", 1999 Prentice Hall Upper Saddle River, NJ USA, pages 3-7 and 285-286. And unless truly frictionless bearings, such as aerostatic (pressurized air)

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bearings, are used there will always be some resistance to motion. *See, e.g.*, Slocum, A.H., “Precision Machine Design,” 1992 Prentice Hall Englewood Cliffs, NJ USA, pages 423, 425-433, 551-556. It is the friction in the guide bushings (bearings) that is effectively the same external help to hold down the splash shield as would be provided by a spring or a clamp (clamps hold by friction, think a clutch, brake, or even a paper clip) for example. In fact, Hamilton Beach’s engineers testified that they had to add a weight to overcome the friction forces that sometimes prevented free sliding of the shield (*i.e.*, the bushings can never be perfectly aligned and thus created binding forces), and so the top weight they added ensured that the splash shield would reliably always descend. Williams 121-24, Branson 79-80. By the principle of reciprocity, because a weight is needed to overcome friction in the mechanism to move the splash shield into position, it is the friction in the mechanism that helps keep the splash shield in place. *See* Slocum, A. H., “FUNdaMENTALS of Design”, and accompanying lecture videos and notes available free on-line (<http://pergatory.mit.edu/2.007/resources/FUNdaMENTALS.html> pages 3-14 to 3-16). The study of mechanisms is over a century old and the study of energy and forces and their effect on bodies, such as friction caused by the bushing of an external guide rod or force applied by an external weight. “Precision Machine Design,” page 77; J. Phillips, J., “Freedom in Machinery: Introducing Screw Theory,” Cambridge University Press, London, 1982.

74. Dr. Maynes also gives excessive weight to the contention that the purpose of the Accused Products’ splash shield design “has always been for it to fall under its own

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weight,” but then conducts no testing to confirm if the accused splash shield/lid meets the limitations of the ’658 patent. Mr. Branson said the “assembly” was intended to fall under its own weight but there would be some restriction on the upward movement of the lid at the splash shield and the guide rod bushings. Branson 109-10 Even if the restraint on the splash shield is minimized, it is still restrained. Moreover, Mr. Williams confirmed this restraint and noted that splash shield of the MIC200 could be pushed upwards if enough force was applied to “overcome the resistance of the bushings, spindle seal and the weight.” Williams 127-30. In addition, the Accused Products include a Teflon-graphite shaft seal from Trelleborg (HBBF0021831-32) to confine any mixing mess in the area where rinsing occurs and the very tight seal around the shaft “induces friction, regardless of the material.” By contrast, Fig. 2B shows that the free-floating splash shield 22 of the ’658 patent includes an opening 24 that is larger than the shaft so that ingredient mass pass through the opening into the cup. Col. 3:26-32. With the additional weight, guide rods, and shaft seal, it is clear the Hamilton Beach did not appropriate the free-floating splash shield disclosed in the sole embodiment of the ’658 patent.

75. As evidenced by Paragraphs 71 and 72 of his report, and as later repeated at Paragraphs 99 and 100, Dr. Maynes conveniently forgets to also state that the guide rods are just that—rods that are guided by bushings which contact the rods, and indeed, the guide rod weight was added because without it, the rods sometimes stick in the bearings in which they slide. These guide rods in the Accused Products also provide lateral restraint that prevent that splash shield from being displaced away

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from the opening of the cup. These restraining forces at the shaft seal and guide rods within the bushings of the Accused Products create binding if they are not properly aligned, and a weight was chosen to further restrain the splash shield to eliminate such binding. Williams 123-24. The weight was cheaper than a spring but achieved the same effect. Rather than being placed “on top” of the splash shield, the weight is separated from splash shield by the entire length of the guide rods of over 9.5 inches. Accordingly, the Accused Products do not infringe claims 1 and 5-11 of the ’658 Patent because they do not include an “unrestrained” splash shield.

76. Claims 1 and 6 also contain similar “sufficient mass” limitations, whereby the mass of the splash shield is sufficient to retain the vessel in the holder during relative translation of the mixing element in the vessel. The Court construed the sufficient mass limitations to mean “the splash shield is heavy enough to create sufficient downward force on the vessel so as to retain the vessel within the holder when the mixing element moves upwardly in the vessel from the first position to the second position when liquid is present.”
77. It is telling that Dr. Maynes performed no testing to determine whether or not the splash shield is of sufficient mass to retain the vessel within the holder. Dr. Maynes’ conclusion appears to be based solely on his inspection of the machine, and thus, is not the product of reliable scientific testing. For example, Dr. Maynes notes in Paragraph 71 that, “The weight of the lid assembly (as well as the detail of the cup holder) prevents the cup from rotating” but only cites an email from Brian O’Flynn to Zachary Waite as support. HCC_026762. However, the ’658 patent makes clear that if the mass of the splash shield is sufficient, it “causes the cup to

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remain seated in the cup holder without any other mechanical means of retaining it in the cup holder, such as clamping or gripping mechanisms or the springs or lid placement and retention mechanisms previously described.” 4:66-5:5. The weight of the entire splash shield assembly is much less than the 5 lbs disclosed as the sole embodiment and Dr. Maynes performed no testing to confirm whether the mass of the Accused Products is sufficient to retain the vessel in the holder without the gripping mechanisms in the cup holder of the Accused Products.

78. As shown in Section 3 of Exhibit2, the mass of the MIC2000 is certainly not sufficient to retain the vessel in the holder. The MIC2000 is representative of the Accused Products. I was shown a video of an older MIC2000 used in the Wilmington Hospital in Delaware. HBBF0172789. In the video, the vessel rotated during mixing and was lifted up with the splash shield during axial movement of the shaft during a mixing operation. Based on my viewing of the video, I determined that the rubber gripping fingers/ribs had been worn down and no longer adequately gripped the cup.
79. To test if the splash shield was of “sufficient mass,” I removed the rubber gripping ribs from the cup holder and operated the machine such that only the splash shield assembly was acting on the cup. For purposes of the test, I did not remove the guide rod weight. During my testing of an Accused Product, I was able to essentially replicate the results from the Wilmington Hospital discussed in my Test Report of the MIC2000. HBBF0172875. As shown in Fig. 15 of Exhibit 2, the cup was not retained within the holder when the mixing element moves upwardly in the vessel from the first position to the second position when liquid is present. The cup was

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clearly lifted from the holder by a vacuum created during the axial movement of the mixing element during the mixing process. The cup also rotated during mixing showing that the splash shield did not include sufficient mass by itself to prevent such rotation and retain the cup in the holder. Accordingly, the splash shield of the Accused Products does not have sufficient mass to retain the cup within the holder, even with the added mass provided by the separate guide rod weight, and a gripping mechanism is needed for this function. Therefore, the Accused Products do not infringe claims 1 and 5-11 of the Accused Products because they do not include a splash shield that satisfies the “sufficient mass” limitations.

80. In addition, Plaintiffs cannot use the doctrine of equivalents so that the asserted claims of the '658 patent include a “restrained” splash shield or a lid of “insufficient mass.” By doing so, the “unrestrained” and “sufficient mass” limitations would be rendered meaningless. It is my understanding the doctrine of equivalents cannot be used to eliminate claim limitation altogether in such a manner. In addition, the lid of the Accused Products includes a very distinct structure and works in a substantially different way than the patented free-floating splash shield. By contrast, the accused splash shield assembly is guided via a sliding arrangement of guide posts and bushings, and these guide posts are restrained by an additional weight to prevent binding, which means that the binding forces also must (and do) contribute as a mechanism to keep the splash shield in position. In addition, all of the Accused Products include a gripping mechanism in the cup holder to retain the cup during mixing. Indeed, an important invention claimed by the '658 patent is that it does not need any mechanism to support or aid the splash shield in any way,

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and a POSITA would recognize that in addition to increasing reliability and reducing complexity; and thus cannot be using (substantially) the same way to achieve the same function of the invention.

81. Moreover, issued claim 6 (new claim 26 during prosecution) was a new claim added to the divisional application. HBBF0050818. The Applicant then made a narrowing amendment to the “sufficient mass” limitation of claim 6 to add the function was to prevent separation of the splash shield and the holder. HBBF0050766. With respect to the sufficient mass limitation of claim 1 (original claim 18 during prosecution), the Applicant made narrowing amendments to add that the sufficient mass retains the vessel during relative axial movement of the mixing element when liquid is present in the vessel. HBBF0050817, HBBF0050766. Regarding the “unrestrained” limitation, it was added in a narrowing amendment to claims 1 and 6 to secure allowance of the ’658 patent. HBBF0050706-12. In view of these amendments narrowing the “sufficient mass” and “unrestrained” limitation to get the ’658 patent, I understand that this is another reason that Plaintiffs cannot assert infringement under the doctrine of equivalents to expand the scope of those limitations.
82. With respect to claim 5 (that depends from claim 1), the claims says that “the splash shield has a mass of approximately 5 lbs” but Dr. Maynes acknowledges that the mass of the accused splash shield is less than 5 lbs. Dr. Maynes says the weight of splash shield assembly is 3.74 lbs and that is “comparable” to 5 lbs. The definition of the adjective “approximate” is “nearly correct or exact.” Exhibit 3. The 1.26 lb discrepancy is more than 33% of weight the MIC2000 splash shield assembly, and

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I do not believe a POSITA would consider such a discrepancy to mean that 3.74 lbs is “approximately” 5 lbs. Dr. Maynes gives no basis for his conclusion that such a testimony would be accepted principle of machine design understood by a POSITA. Further, Plaintiffs agreed that the construction of splash shield is a “lid for the cup opening.” A POSITA would understand that the guide posts, weight, and surrounding cup shield are not part of the “splash shield” as construed by the parties, which is limited only to the lid. The weight of the lid by itself for the MIC2000 is 527g (1.6 lbs) and the weight of the lid for the BIC3000-DQ is 228 g (0.50 lbs). HBBF0172881, HBBF0172882. With or without the added weight of the splash shield assembly components, none of the lids of the Accused Products are even close to being “approximately” 5 lbs as understood by a POSITA. Thus, the Accused Products do not infringe claim 5 for this additional reason. Moreover, the scope of claim 5 cannot be expanded through the doctrine of equivalent because interpreting 5 lbs to means 3.74 lbs or less would render the limitation meaningless.

E. '150 Patent

83. Plaintiffs assert claims 15, 20 and 22 of the '150 patent against the Accused Products. Only claim 15 is independent, which recites:

On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:

a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;

a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and

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at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield within the rinse chamber.

84. The parties agreed that the splash shield limitation of claim 15 should mean “a lid positionable to cover most of the cup opening” and that nozzle limitation should “one or more nozzles coupled to a rinse fluid source and pointed at the splash shield to directly spray fluid onto a surface of the splash shield within the rinse chamber.” Further, the court interpreted a rinse chamber to mean “an enclosure in which a rinse apparatus is positioned to provide rinsing.”
85. The IMI2000 is a mixing device that is a module that is intended to be used with a machine provided by IMI Cornelius. That machine is shown and described in paragraphs 57-59 of Dr. Maynes’ report which cites the IMI2000 product specification. HBBF0000122. In addition Hamilton Beach obtained U.S. Patent No. 8,807,823 (“the ’823 patent”) that covered the IMI2000 concept. Branson 57. As shown the product specification and the Fig. 8 of the ’823 patent, the splash shield assembly (comprised of a shield that surrounds the cup and a lid that covers the top of the cup) lowers into a washing position at a wash chamber with a drain in order to rinse the lid and the surrounding cup shield in an enclosure formed by the lid and the surrounding cup shield. Nozzles are provided in a manifold disposed within the enclosure formed by the lid and the surrounding cup shield to rinse the cup shield, lid, and mixing element as shown in Figs. 9-11 of the ’823 patent. There is no door on this enclosure, and thus, the IMI2000 does not infringe claims 15, 20, and 22 of the ’150 patent.
86. In his report, Dr. Maynes alleges that the door assembly of the MIC2000, BIC2000, and BIC3000-DQ correspond to the claimed rinse chamber. There is no dispute

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that rinsing occurs in the same manner in all of the Accused Products where the splash shield assembly lowers to enclose the nozzles in the wash chamber.² Plaintiffs must allege this door assembly constitutes a rinse chamber in an attempt to have these Accused Products read on claim 15 of the '150 patent, but this assertion is technically unsound and not consistent with the structure or operation of the Accused Products.

87. The door assembly of the Accused Products is removable and is immaterial to the rinsing operation. The primary purpose of the door is to prevent a user from inserting a hand into an area of the machine where pinch point is created by the lowering of the splash shield assembly for mixing and or rinsing. In addition, the door assembly includes a magnet for an interlock to add an additional layer of safety. This door is not fluid tight and includes a sizeable gap, making this door unsuitable for covering the entrance of a rinse chamber. In addition, no rinsing occurs outside the splash shield assembly, and thus, rinsing fluid does not come into contact with the exterior of the splash shield (including the door assembly) as taught by the '150 patent when rinsing the lid.
88. To demonstrate that the door assembly is not a “rinse chamber,” and to facilitate observation of the machine operating (including the rinse cycle), I removed the door assembly and operated the MIC2000. I used magnets to replicate the interlock

² The BIC3000-DQ includes a slightly different arrangement with a domed lid that encloses the nozzle in the wash chamber without a surrounding cup shield. This arrangement also does not include a door to access the actual enclosure in which the nozzle is positioned to provide rinsing. <http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard>.

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provided by the door as described in Section 4 of Exhibit (Test Report). Without the door assembly, rinsing occurred in the enclosure formed by the lid and surrounding cup shield. This is the enclosure into which the nozzles are positioned to provide rinsing completely within the inside of the enclosure formed by the splash shield and not the top of the splash shield. All of the Accused Products operate in substantially the same manner. Even though all the Accused Products are substantially the same with respect to rinsing, it is Dr. Maynes' opinion that the IMI2000 does not have a rinse chamber even though it includes "an enclosure in which a rinse apparatus is positioned to provide rinsing." A POSITA would not consider an external door assembly unrelated to the rinsing as part of a rinse chamber in view of basic machine design principles. Thus, none of the Accused Products include a door on a rinse chamber as interpreted by the Court. Consequently, the Accused Products do not infringe claims 15, 20, and 22 of the '150 patent.

89. The Accused Products do not infringe claims 15, 20, and 22 of the '150 patent under the doctrine of equivalents either. The rinse chamber limitation was added in a narrowing amendment in response to a rejection. HBBF0051106-12. Moreover, the doctrine of equivalents cannot be used to eliminate the requirement that the rinse chamber include a door covering an entrance. A physical inspection and observation of the Accused Products is more than sufficient proof to show that the Accused Products work in a substantially different way with distinct structure as compared to the asserted claims of the '150 patent.

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90. Claim 15 also requires that “at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield within the rinse chamber.” Thus, the claim also requires that the lid be within (*i.e.*, inside) the rinse chamber. But the lid of the Accused Products actually forms part of the enclosure, unlike the disclosure of the ’150 patent where the shield 22 is rinsed by nozzles 34a, 34b within enclosure 40. Accordingly, the lid is not within a rinse chamber as disclosed by the ’150 patent. Moreover, there are no nozzles in the enclosed area between the door assembly and the enclosed area between the lid and cup shield, and thus there is no “rinse fluid directed onto the splash shield within” that enclosed area. Thus, the Accused Products do not infringe claims 15, 20, and 22 of the ’150 patent for at least this additional reason.
91. Claim 22 (that depends from claim 15) recites “wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.” My experiments with the MIC2000 show that the vessel is not retained in the holder simply with only the mass of the entire splash shield assembly (including the lid, weight, guide rods, and surrounding cup guard). My tests showed that the mass of the lid by itself is not sufficient to retain the vessel in the cup holder, as there are times when with the rubber grips in the cup holder removed, that the cup is lifted out of the cup holder. Exhibit 2, Fig 15. Thus, the Accused Products do not infringe claim 22 of the ’150 patent for this additional reason.

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92. As noted above, the Court construed the term “providing a mixing machine” as “making a mixing machine available for use.” With respect to the MIC2000 machines, other than the limited instances in Dr. Maynes’ report where Hamilton Beach demonstrated that product,³ the various retail locations were the entities that made the MIC2000 machine available for use. Moreover, claim 6 of the ’658 patent and claim 21 of the ’662 patent recites “providing a vessel containing material to be mixed.” For the self-service version of the MIC2000 used with Hershey Creamery’s milkshake cups, the retail consumer provided the vessel to the mixing machine to be mixed. In these instances where retail consumers operate the MIC2000, there was no potential act of direct infringement because the performance of the method steps – “providing a mixing machine” and “providing a vessel containing material to be mixed” - is divided between two different entities with no “agency” relationship that requires the consumer to provide a vessel to the mixing machine. Dr. Maynes’ report does not allege any agency relationship but incorrectly asserts that consumers performed every step of the method. Maynes’ Report at ¶¶ 90, 98.

93. Moreover, Dr. Maynes erroneously alleges that the “isolating” step of claim 21 of the ’662 patent could be performed by a consumer. Again, there is no agency

³ Dr. Maynes points to no evidence that any demonstrations that were ever performed with Hershey Creamery ice cream cup. Ann Marie Blackmon testified at page 80 of her deposition that “[w]hen we demonstrated the equipment we did so in a variety of ways with cups of fruit and used cups of ice and mixed cups of water.”

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relationship required the consumer to remove the cup after making a milkshake. The consumer could also just leave the cup in the machine after making a milkshake, requiring the store to remove the vessel so that the MIC2000 may subsequently proceed with rinsing and be available for use by future consumers.

94. As no single entity performs or controls the performance of every step of method claims 6-11 of the '658 patent and method claim 21 of the '662 patent when a consumer operates the MIC2000 with the Hershey Creamery ice cream product, there can be no direct infringement of these method claims. Because Dr. Maynes has not shown any direct infringement by consumers that use the MIC2000 with the Hershey Creamery ice cream product, there can be no indirect infringement of those method claims by Hamilton Beach or Hershey Creamery for such use by consumers.

X. THE ACCUSED PRODUCTS OPERATE IN A SUBSTANTIALLY DIFFERENT MANNER THAN F'REAL'S SELF-RINSING BLENDERS

95. My understanding is that while evidence of alleged copying may be relevant to the issue of obviousness, it is of no import on the question of whether the claims of an issued patent are infringed. I also understand that copying is irrelevant to determining infringement, which is based solely on a comparison between the Accused Products and the asserted patent claims. I also understand that, in some cases, evidence that a competitor has copied a product embodying a patented invention can be considered as evidence that an invention is not obvious. A review of Dr. Maynes' report shows that he makes a number of conclusory statements at Paragraphs 115-119 of his report that are not based on any technical evidence.

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96. I understand that copying requires evidence of efforts to replicate a specific product, which can be shown by evidence such as disassembling a patented prototype, photographing its features, and using the photograph as a blueprint to build a virtually identical replica, or access to the patented product combined with substantial similarity to the patented product. All we know is that Hamilton Beach engineers made some milkshakes with a f̄real machine at Wawa and have seen the inside of its rinse chamber. Williams 20-21 (“we didn’t do any kind of disassembly of the product.”) I wouldn’t call this “carefully” studying f̄real’s products by Hamilton Beach’s engineers as they never dissembled the machine or saw its inner workings. It is a normal part of product development to consider other products with a capability you hope to develop. I have operated a f̄real machine, as well as a Hamilton Beach accused product, and I can attest to the fact that the f̄real machine is a very different machine than the Accused Products.
97. In his report, Dr. Maynes makes numerous unsubstantiated statements alleging that Hamilton Beach copied f̄real’s patented blenders. Without detailing any comparison made between specific aspects of the Accused Products and supposedly corresponding aspects of f̄real’s products, Dr. Maynes concludes that “all of the accused Hamilton Beach blenders point one or more pre-positioned nozzles at the splash shield” and “[a]ll the accused Hamilton Beach blenders also use the type of weighted, free-floating splash shield positioned around the blending spindle shaft that f̄real invented and patented.” Dr. Maynes fails to provide any evidence that any of Hamilton Beach’s Accused Products are a replica of f̄real’s products, or that Hamilton Beach made efforts to replicate any of f̄real’s products. According to

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Dr. Maynes, Hamilton Beach allegedly copied “f’real’s idea of a self-rinsing blender,” “f’real’s idea of adding liquid in the process of reconstituting a frozen milkshake,” “f’real’s approach of using a blending blade with a ‘sharp depressed edge and a slim cross-sectional profile’,” and “f’real’s approach of using a ‘curved, wave-like structure’ with a slim cross-sectional profile.” However, even assuming such allegations were true, which they are not, copying an “idea” or an “approach” does not amount to replicating a specific product. Dr. Maynes appears to be equating infringement and copying. Hamilton Beach has developed its own solution for a self-rinsing blender that does not infringe the asserted patents.

98. From my understanding of the applicable law, it is not enough merely to say that, because Hamilton Beach’s Accused Products have rinsing nozzles and a splash shield, those products are evidence of copying because of the many examples I have cited in the prior art in my opening report. At best, the evidence relied on by Dr. Maynes establishes that Hamilton Beach engaged in normal product development and design practices. I have used both machines, which operate in a substantially different matter: f’real rinses a free-floating splash shield in a chamber that shields the access location with a pair of automatic doors so that that cup may remain in the holder when rinsing while the Accused Product includes a splash shield assembly restrained by a guide post/bushing arrangement that rinses/mixes in the access location so that the finished milkshake must be removed before rinsing. This creates a slower cycle time, a disadvantage the f’real touts to potential customers based on the machine completing rinsing before the cup holder with the cup returns to the “home” position where the consumer retrieves the finished milkshake.

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F'REAL_000218-19. That Hamilton Beach may have recognized some of its customer's demand for a self-rinsing machine, as well as the challenge in meeting this demand, is not sufficiently connected to any alleged act of copying or attempted copying of f'real's products. Thus, there is no technical basis for Dr. Maynes' statements regarding the purported copying of f'real's patented blenders, and thus should be given no weight.

99. Dr. Maynes also asserts in his report that "Hamilton Beach's engineers concluded there were no suitable alternative non-infringing substitutes to copying f'real's patented technology." As an initial observation, I note that Dr. Maynes remarks are once again entirely conclusory and I cannot understand how he read the minds of Hamilton Beach's engineers. While I am not an expert in this area, I also note that Dr. Maynes provides no analysis or discussion of any other blender machines, such as those offered by Nestle and Manitowoc or the shake of Cold Cow, just to name a few mentioned by Mr. Voges in his deposition testimony as a corporate representative of f'real. In addition, for the '377 patent that describes a crew serve application, a number of alternatives are known for making milkshakes with ice cream and even acknowledged in Dr. Maynes' report. I am not sure that as a technical expert that Dr. Maynes is well-suited to opine on this issue.

XI. F'REAL WAS AWARE THAT HAMILTON BEACH BELIEVED THAT IT DID NOT INFRINGE ANY VALID ASSERTED PATENT PRIOR TO THIS CASE

100. Dr. Maynes opines on a number of subjects that fall outside his expertise, one of which is Defendants' subjective intent in going forward with the Accused Products and Hershey Creamery going forward with the Shake Shop Express. One of the

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main “facts” he relies upon is Hamilton Beach terminating a license in 2011 before the Accused Products were fully developed. Nothing in Dr. Maynes’ C.V. suggested he is an expert on licensing. Notwithstanding these opinions outside of Dr. Maynes’ technical expertise, I understand that the jury may consider the Defendants’ actions prior to the alleged infringement in assessing whether it is willful.

101. Dr. Maynes cited a number of communications between Hamilton Beach and f’real regarding the license ’150 family. I have been asked to review a number of documents to assess whether I agree with Hamilton Beach’s positions communicated to f’real regarding the relative strength of the ’150 patent family. I understand that these communications predate the license termination discussed in Dr. Maynes’ report.
102. Spotts Fain prepared an analysis of the ’150 patent family in view of the Manitowoc Multiplex machine. HBBF0049795-963. I understand that the substance of this presentation was communicated to f’real in negotiations prior to terminating the license to the ’150 patent family. My opinions are limited to a technical analysis of the positions that Hamilton Beach communicated to f’real that reflects the analysis with Spotts Fain.
103. In the analysis of the ’150 patent family, the presentation outlined that many of the claims explicitly required that the rinsing area be different than access location and eliminated such claims from consideration. Regarding the ’150 patent, the analysis narrowed to claims 15 and 20-22. Claims 15 and 20 required a door on a rinse chamber in which the splash shield is rinsed. As the Accused Products do not

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include such a door, this claim was not at issue. Regarding claims 21 and 22, the presentation recognized that the weight of the splash shield itself had to restrain the cup when the shaft/blade is lifted. This too is technically sound and consistent with my analysis. In addition, the Manitowoc product may have had a door to a rinse chamber, unlike the Accused Products. So validity of claims 15 and 20 was examined. I agree with the presentation that Kelly is a strong reference for invalidating claims 15 and 20 and can be further strengthened with additional references as cited in my opening report. Accordingly, the positions Hamilton Beach took regarding infringement and validity of claims 15, 20, and 22 of the '150 patent are technically sound and consistent with my opinions. Therefore, Hamilton Beach had a reasonable technical basis for determining it did not practice any valid claims of the '150 patent.

104. The same applies to claims 1 and 5-11 of the '658 patent. Right away, it is recognized that claims 1 and 6 require an "unrestrained" splash shield and the weight of the splash shield itself had to restrain the cup when the shaft/blade moved vertically. In the presentation itself, Manitowoc appeared to have guide rods or support bars that restrain the splash shield. In a subsequent communication, Hamilton Beach informed me that the patent was easily designed around because any detent mechanism that restrained the upward movement of the splash shield would fall outside the scope of claim 1 and 6, as well as corresponding dependent claims 5 and 7-11. HBBF0103731-33. Hamilton Beach included a number of features in the Accused Products that restrained the upward movement of the lid and included a gripping cup holder to retain the cup. Hamilton Beach's position

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regarding the '658 patent were technically sound and consistent with my opinion, and thus, are a reasonable basis for determining it did not practice the '658 patent.

105. Regarding the '662 patent, the presentation indicated that claim 21 was invalid if it covered removing the cup in view of Kelly's teachings and the claim was not infringed if "isolating" was interpreted consistent with the '662 patent's intrinsic record. As evidenced by my opening report and this rebuttal report, I agree with this technical analysis. So again, Hamilton Beach had a reasonable basis for determining it did not practice any valid claim of the '662 patent.

106. The '377 patent was not part of the license between f'real and Hamilton Beach and is not discussed in the presentation. However, the Defendants did consider that patent before Hershey Creamery offered its milkshake program. HBBF0021797-98. Mr. Zachary Waite confirmed that the Shake Shop Express used ice cream, and the patent described a "frozen substance" that was a frozen block, which isn't ice cream with air already incorporated during freezing. In addition, Mr. Waite confirmed there was no "grinding" or "shaving" of the tempered ice cream that is further softened by a water shot before mixing. Again, this is consistent with my analysis of the '377 patent in this rebuttal report and is a reasonable basis for determining that no claim of the '377 patent was infringed by the MIC2000 with Hershey Creamery's milkshake cup.

XII. PRE-PACKAGED CUPS AND THE BLENDERS OF THE '150 FAMILY ARE NOT A FUNCTIONAL UNIT

107. I understand that Plaintiffs are seeking lost profits based on the sale of Hershey Creamery's pre-packaged ice cream cups, which are not claimed in the asserted

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claims of the '150 family. While the '150 patent family describes a “vessel,” this is not an allegedly patentable feature of any claim as mixing in a vessel is a longstanding and well-known practice as admitted in the Background of the Invention section of the '150 patent family's disclosure. Moreover, the “vessel” limitation is not limited to any particular cup, and thus, is not limited to cup with a pre-packaged frozen substance like the type sold by f'real. Because a person operating a blender/mixer practicing the claims the '150 patent family could provide their own cups that they fill with ingredients, the pre-packaged cups sold by f'real are not part of a single, functional unit necessary to practice any claim of the '150 family.

108. Similarly, the pre-packaged cups can be used with a blender/mixer that does not practice any claim of the '150 patent family. For example, the '377 patent does not disclose either a splash shield or rinsing after a mixing operation. The earlier model of the f'real blender that practiced the '377 patent (FRLB1), which did not have rinsing features, uses the same pre-packaged cups as today. Farrell 40-41, 79. In addition, f'real's pre-packaged cups can be used with its new B7 blender that includes a splash shield restrained by a spring and has no rinsing function. <https://retailers.freal.com/behind-counter/>; Voges 40. Likewise, the Accused Products may be used with or without pre-packaged cups, which is true for most types of blenders/mixers.

EXHIBIT B

1 IN THE UNITED STATES DISTRICT COURT

2 IN AND FOR THE DISTRICT OF DELAWARE

3 - - -

4 F'REAL FOODS, LLC and) Civil Action
5 RICH PRODUCTS CORPORATION,)

6 Plaintiff,)

7 v.)

8 HAMILTON BEACH BRANDS, INC.,)
9 HERSHEY CREAMERY COMPANY and)
PAUL MILLS d/b/a/ MILLS BROTHERS)
MARKETS,)

10 Defendants.) No. 16-41-GMS
(Consolidated)

11 - - -

12 Wilmington, Delaware
13 Tuesday, October 17, 2017
9:30 a.m.
14 Markman Hearing

15 - - -

16 BEFORE: HONORABLE GREGORY M. SLEET, Senior Judge, U.S.D.C,
District of Delaware

17 APPEARANCES:

18 RODGER D. SMITH, II, ESQ., and
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9 **Counsel for Defendant Hamilton**

Beach Brands, Inc.

10 **- - -**

1 putting a lead weight on top of it is, the whole idea of
2 that is to make it sufficient to hold it in the cup holder.
3 So this ambiguous expression --

4 THE COURT: Without regard to any other
5 variables counsel suggested, might, should be accounted for,
6 speed of the blade, volume in the cup, that kind of thing?

7 MR. CHAMBERS: Well, I am going to trust the
8 jury to get this one right. Why do you put the lead bar
9 there? I am very concerned about this ambiguous expression,
10 without any other retention means. He has indicated that
11 that means a cup holder. And that reads out the
12 specification. So that's wrong.

13 I think that's all I need to say on that.

14 So we are up to providing a mixing machine. Our
15 proposed construction is furnishing, supplying, making
16 available, or preparing a mixing machine. Theirs is making
17 a mixing machine available for use.

18 So the specification discusses this from the
19 perspective of the user having a mixing machine available
20 for use. You put the cup with frozen ingredients in the cup
21 holder, and you press the start button at the exterior of
22 the machine. What they are doing is trying to create a
23 divided infringement argument, because they are saying that
24 the consumer uses the blending machine but the blending
25 machine is provided by the retail stores, real trickster

EXHIBIT C

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (GMS)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

PLAINTIFFS' FINAL INFRINGEMENT CONTENTIONS FOR DEFENDANTS

Pursuant to the Stipulation And Order Amending Scheduling Order (D.I. 82), Plaintiffs f'real Foods, LLC and Rich Products Corporation hereby provides the following final infringement contentions for U.S. Patent Nos. 7,520,662 (the "'662 patent"), 7,520,658 (the "'658 patent"), 7,144,150 (the "'150 patent") and 5,803,377 (the "'377 patent)(collectively the "Patents-in-Suit") to Hamilton Beach Brands, Inc., Hershey Creamery Company, and Paul Mills d/b/a Mills Brothers Markets (collectively, "Defendants"). Based upon the available evidence, Defendants have collectively infringed the Patents-in-Suit directly, contributorily and by inducing infringement. Infringement has been both literal and under the doctrine of equivalents.

These infringement contentions are based on information reasonably available to Plaintiffs at this time, some of which is confusing and contradictory. For example, at his deposition, Defendant Hamilton Beach's principal design engineer for the infringing blenders, Mr. Brian Williams, testified that Hamilton Beach has developed a new stand-alone blender

designated as the “MIC3000-DQ” (Williams Dep.¹, p. 30). According to Mr. Williams, Hamilton Beach has no other stand-alone units of this type besides the MIC2000, BIC2000 and MIC3000-DQ (Williams Dep., p. 30). Nonetheless, publicly available Hamilton Beach promotional literature indicates that Hamilton Beach has developed and is offering for sale a stand-alone unit designated as the “BIC3000-DQ,” that appears to be similar to Mr. Williams description of the “MIC3000-DQ.” To exacerbate the confusing testimony from Mr. Williams, Hamilton Beach has failed to provide a complete set of technical documents for its new “DQ” blenders (*see* f^{real}_005876-f^{real}_005892).

For purposes of Plaintiffs’ final infringement contentions, Plaintiffs will refer to the new “DQ” blender(s) as the “MIC/BIC3000-DQ.” Due to the incomplete status of discovery to date and the need for Plaintiffs to work with its technical expert based upon a more complete and consistent discovery record, Plaintiffs reserve the right to amend and/or supplement these disclosures based on further information provided to during the course of this litigation, including during the course of fact and expert discovery that has yet to take place. Plaintiffs also reserve the right to supplement and/or amend these contentions following any additional interpretation by this Court of the meaning of the asserted claims. Finally, no statements made herein are intended as an admission regarding the meaning of any claim term.

¹ “Williams Dep.” refers to the transcript of the December 13, 2017 deposition of Brian P. Williams.

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January 29, 2018

**F'REAL FOODS, LLC FINAL INFRINGEMENT
CLAIMS CHART FOR U.S. PATENT NO. 7,520,662**

U.S. Patent No. 7,520,662	Comments
21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:	The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 mixing machine blenders automatically perform a method for rinsing a splash shield after the inserted drink is blended and removed (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, "Auto-Rinse"; physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 156-160; MIC/BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
providing a vessel containing material to be mixed, the vessel including an opening:	The cup (vessel) has a drink inside and includes a top opening (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 156-160)

U.S. Patent No. 7,520,662	Comments
<p>further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield:</p>	<p>The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders have a cup holder for receiving the cup, a rotatable mixing blade extendable into the cup for mixing the drink, a splash shield positionable to shield the top opening of the cup, and rinse nozzles oriented to spray rinse water towards inside surfaces of the splash shield (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF28, HBBF322; HBBF441; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64,156-160)</p>
<p>After mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.</p>	<p>After the MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders mix the drink in the cup while the splash shield lid is shielding the cup opening, the splash shield lid is lifted from the cup opening (unshielding) to allow the cup to be removed and then the blender automatically directs rinsing fluid onto inside surfaces of the splash shield using rinse nozzles. Since the cup is removed before the automatic rinsing, the cup is isolated from the rinsing fluid during the rinsing step (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF28; physical inspection of MIC2000; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64,156-160) .</p>

**F'REAL FOODS, LLC PRELIMINARY INFRINGEMENT
CLAIMS CHART FOR U.S. PATENT NO. 7,520,658**

U.S. Patent No. 7,520,658	Comments
1. A mixing machine for mixing a liquid in a vessel having an opening, the mixing machine comprising:	<p>The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 mixing machine blenders mix a liquid drink contained in a cup (vessel) with a top opening (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M; https://www.youtube.com/watch?v=GKZmxM5PpEE; Hamilton Beach SmartServe Operation Manual, HBBF23-29 “Water Scale”; physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; MIC/BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)</p>

U.S. Patent No. 7,520,658	Comments
a holder coupled to the mixing machine, the holder proportioned to receive a vessel;	The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders each have a cup holder proportioned to receive a cup (Shake Shop Express and MIC/BIC3000-D videos; U.S. Patent No. 8,807,823 ('823 patent), cup-receiving holder 40; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; HBBF 25 "Cup Holder", HBBF43; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;	The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders each have a rotatable blending/mixing blade element that is extendable through the top opening of the cup positioned in the cup holder for mixing the drink contents contained in the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; HBBF322, HBBF441; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)

U.S. Patent No. 7,520,658	Comments
<p>a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;</p>	<p>The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders each have a stepper motor operatively coupled to the mixing blade to effect axial translation of the mixing blade from a first (in this case lower) mixing position to a second (in this case higher) mixing position, the mixing blade being positioned further from the cup opening when in the first (lower) mixing position than in the second (higher) mixing position (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)</p>
<p>a shaft; and</p>	<p>The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders each have a mixing shaft between the mixing motor and mixing blade element physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)</p>

U.S. Patent No. 7,520,658	Comments
<p>a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.</p>	<p>The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders each have a splash shield slidable on the mixing shaft (through an aperture in the splash shield lid) between a first (in this case higher) splash shield position and a second (in this case lower) splash shield position, the splash shield in the second (lower) position positionable with its splash shield lid covering the cup opening and being unrestrained against a sliding movement on the mixing shaft in a direction away from the cup opening, the splash shield having sufficient mass (when its lid covers the cup opening), in part by virtue of its heavy cast iron guide rod weight, to retain the cup within the cup holder during relative axial movement of the mixing blade and the cup from the first (higher) shield position to the second (lower) shield position when liquid is present in the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).</p>
<p>5. The mixing machine of claim 1, wherein the splash shield has a mass of approximately 5 lbs.</p>	<p>The Hamilton Beach MIC2000 splash shield assembly was measured to weigh 3.74 lbs. It is believed the BIC2000, MIC/BIC3000-DQ and IMI2000 splash shields have a comparable weight (physical inspection of MIC2000; HBBF0014976-80; HBBF0001747-65; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)</p>

U.S. Patent No. 7,520,658	Comments
6. A method for retaining a vessel in a holder while mixing the contents of the vessel, the method comprising the steps of:	The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 mixing machine blenders each retain a cup in a cup holder while mixing the contents of the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF 25 “Cup Holder”; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
providing a vessel containing contents to be mixed, the vessel including an opening;	The cup (vessel) has contents to be mixed inside and includes a top opening (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; HBBF0014976-80; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
further providing a mixing machine having a holder on the mixing machine for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, and a shield;	The Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blenders each have a cup holder for receiving the cup, a rotatable mixing blade extendable into the cup for mixing the cup contents and a splash shield to shield the top opening of the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
positioning the vessel in the holder;	After selecting a cup with contents to be mixed, the user places the cup in the MIC2000, BIC2000, MIC/BIC3000-DQ or IMI2000 cupholder (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; HBBF 25 “Cup Holder”; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)

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<p>positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening; and</p>	<p>After the user presses the START button, the Hamilton Beach MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 blender positions its splash shield in contact with the top of the cup to cover its top opening, the splash shield is slidable on the mixing shaft (through an aperture in the splash shield lid) in a way that is unrestrained against an upward movement on the mixing shaft in a direction away from the cup opening (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).</p>
<p>with the vessel positioned in the holder, using a motor to translate at least one of the mixing element and the holder such that the mixing element passes through the contents of the vessel, the mass of the splash shield preventing separation of the holder and the vessel during translation.</p>	<p>With the cup positioned in the cup-receiving holder, the MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 stepper motor axially translates the mixing blade up and down such that the mixing blade passes through the contents of the cup while the mass of the splash shield prevents separation of the cup from the cup-receiving holder during translation. A cast iron guide rod weight is placed on top of the upper stop plate of the splash shield assembly to better insure there is no separation of the cup from the cup-receiving holder during translation and blending (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)</p>

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7. The method of claim 6, wherein the method further includes the step of rotating the mixing element to mix the contents of the vessel	The MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 each use their mixing motor to rotate the mixing blade to mix the contents in the cup (Shake Shop Express videos;HBBF28, HBBF322; HBBF0014976-80; HBBF441; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
8. The method of claim 7 wherein translating the mixing element includes translating the mixing element while rotating the mixing element to mix the contents of the vessel.	The MIC 2000, BIC2000, MIC/BIC3000-DQ and IMI2000 stepper motors each translate the mixing blade up and down while the mixing blade is mixing the contents of the cup (Shake Shop Express videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; HBBF0014976-80; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
9. The method of claim 6, wherein the method further includes containing a substantial portion of contents splashing from the vessel within the shield or vessel.	The MIC2000, BIC2000, MIC/BIC3000-DQ and IMI2000 splash shields prevent a substantial portion of the contents in the cup from splashing out during the blending/mixing process (Shake Shop Express and MIC/BIC3000-DQ videos;physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)

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10. The method of claim 6, wherein the contents of the vessel are at least partially frozen.	The contents of the cup are at least partially frozen. For the MIC2000 in the Shake Shop Express kiosks, frozen Hershey milkshakes are used. For the MIC/BIC3000-DQ, frozen ice cream is used. For the BIC2000 and IMI2000, ice is mixed with flavorings (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; HBBF0014976-80; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
11. The method of claim 6, wherein the contents comprise frozen milkshake ingredients.	The contents in the Hershey cups in the Shake Shop Express kiosks where the Hamilton Beach MIC2000 blenders are used comprise frozen milkshake ingredients. The ice cream used in the MIC/BIC3000-DQ is also a milkshake ingredient (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; HBBF0014976-80; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)

**F'REAL FOODS, LLC PRELIMINARY INFRINGEMENT
CLAIMS CHART FOR U.S. PATENT NO. 7,144,150**

U.S. Patent No. 7,144,150	Comments
<p>15. On a mixing machine for mixing a liquid contained in a vessel having an opening,</p>	<p>The Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ mixing machine blenders each mix liquids in a cup (vessel) having an opening at its top (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M; https://www.youtube.com/watch?v=GKZmxM5PpEE; Hamilton Beach SmartServe Operation Manual, HBBF23-29 “Water Scale”; physical inspection of MIC2000; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; MIC/BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_lau_nch2017)</p>
<p>the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:</p>	<p>The Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ each have a rotatable mixing blade element extendable into the cup for mixing the contents of the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF322, HBBF441; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)</p>

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a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;	The Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ blenders each have a door assembly chamber where rinsing occurs, the door assembly rinse chamber having a front opening serving as an entrance for the cup and a pivotable door moveable to a closed position covering that entrance (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF227 “Door Assembly”; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and	The Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ mixing machine blenders each carry a splash shield which is positionable so that its splash shield lid covers the top opening of the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).
at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber	The Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ mixing machine blenders each have multiple nozzles coupled, through a water hose opening at the back of the blender, to a source of rinse fluid. The nozzles are oriented to direct rinse fluid onto the splash shield within the door assembly rinse chamber (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF227, “Water Hose Opening”; HBBF231 “Auto-Rinse”; HBBF001237-8; HBBF0013240-50;

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	HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
20. The improvement of claim 15, wherein at least one nozzle is oriented to direct rinse fluid onto the mixing element	The Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ nozzles apply rinsing fluid onto the mixing blade and the splash shield (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF227, “Water Hose Opening”; HBBF231 “Auto-Rinse”; physical inspection of MIC2000; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
22. The improvement of claim 15, wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions	The splash shield in the Hamilton Beach MIC2000, BIC2000 and MIC/BIC3000-DQ mixing machine blenders are each of sufficient mass to retain the cup within the cupholder during relative movement of the mixing blade and cup in opposite directions. A cast iron guide rod weight is placed on top of the shield to insure there is no separation of the cup from the cup-receiving holder during blending (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF0014976-80; HBBF001237-8; HBBF0013240-50; HBBF0013251; HBBF0014425; HBBF0014427; HBBF0018003; HBBF0003638; HBBF0001747-65; HBBF0006292-313; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).

**F'REAL FOODS, LLC PRELIMINARY INFRINGEMENT
CLAIMS CHART FOR U.S. PATENT NO. 5,803,377**

U.S. Patent No. 5,803,377	Comments
1. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes frozen into a Hershey cup (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to contain its motors and other blending components (Shake Shop Express videos; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 has a cup holder mounted to the housing (Shake Shop Express videos;; HBBF25, "Cup Holder"; HBBF43; Williams Dep.; physical inspection of MIC2000)
a liquid dispenser having an outlet positioned to direct liquid into a cup positioned in the cup support;	The Hamilton Beach MIC2000 has a liquid dispenser with an outlet positioned to dispense water into a Hershey cup positioned in the cup holder (Shake Shop Express videos; HBBF29, "Water Scale"; Williams Dep.; physical inspection of MIC2000)
grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance; and	The Hamilton Beach MIC2000 has a mixing blade of slim cross-sectional profile with a sharp depressed edge for grinding the frozen Hershey milkshake to form a ground milkshake when the Hershey frozen milkshake cup is positioned in the cup holder (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical

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	inspection of MIC2000)
aeration means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser	The Hamilton Beach MIC2000 has a mixing blade of slim cross-sectional profile with a curved, wave-like shape for causing air to be incorporated into the mixture of the ground frozen milkshake and dispensed water when the Hershey milkshake cup is positioned in the cup holder (Shake Shop Express videos;HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
2. The apparatus of claim 1 wherein the grinding and aeration means comprise a rotatable blade assembly mounted within the housing for extension into a cup positioned in the cup support.	The Hamilton Beach MIC2000 mixing blades which perform the grinding and aeration functions are a rotatable blade assembly connected to the mixing motor within the MIC2000 housing for extension into a Hershey milkshake cup held in the MIC2000 cup holder (Shake Shop Express videos;FIGS. 5, 7; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
3. The apparatus of claim 2 wherein the blade assembly includes a blade member mounted on a shaft,	The Hamilton Beach MIC2000 has mixing blade assembly mounted on a shaft (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade member including first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade member in a fluid, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect.	The Hamilton Beach MIC2000 mixing blade assembly has regions which are spaced apart and on different planes such that, during rotation of the blade assembly, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
4. The apparatus of claim 2 wherein the blade assembly is moveable between upper and lower blade	Through use of a stepper motor, the mixing blade in the Hamilton Beach MIC2000 is moveable between upper and lower blade positions,

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positions, the lower blade position being at a height such that when a cup is positioned in the cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom, and	the lower blade position reaching the bottom of the Hershey cup when the Hershey cup is in the MIC2000 cup holder (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
wherein the apparatus further includes control means for causing the blade assembly to move between the upper and lower blade positions at least twice.	The Hamilton Beach MIC2000 has a control panel which moves the mixing blade assembly between the upper and lower blade positions at least twice during the mixing and rinsing processes (Shake Shop Express videos; HBBF28, “Blending or Mixing Instructions”, HBBF25, “Control Panel/Display”; Williams Dep.; physical inspection of MIC2000)
6. The apparatus of claim 2 further comprising: an initiation switch;	On its control panel, the Hamilton Beach MIC2000 has a “START” button to initiate the mixing/blending process (Shake Shop Express videos; HBBF25, HBBF28; Williams Dep.; physical inspection of MIC2000)
a cup sensor for detecting the presence of a cup in the cup support and for producing an output;	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size is in the cup-receiving holder and for producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating up and down blade movement control signals and blade rotation control signals;	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the MIC2000 control panel will automatically generate appropriate up and down blade movement control signals and blade rotation control signals (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)

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a slidable and rotatable shaft attached to the blade assembly and moveable between upper and lower positions corresponding to upper and lower blade positions;	The MIC2000 has a rotatable shaft between the mixing motor and mixing blade assembly which is slidable with respect to the splash shield and moveable between upper and lower positions corresponding to upper and lower blade positions (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
first and second motors coupled to the shaft,	In the MIC2000, a (first) stepper motor is coupled to the shaft through a carriage to move the shaft up and down and a (second) mixing motor is coupled to the shaft to rotate the shaft (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
the first motor responsive to the blade movement control signals to move the shaft between the upper and lower positions,	The (first) stepper motor is responsive to blade movement control signals from the MIC2000 control panel to move the shaft between upper and lower positions (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
the second motor responsive to the blade rotation control signals to rotate the blade assembly,	The (second) mixing motor is responsive to blade rotation control signals from the MIC2000 control panel to rotate the blade assembly (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
the control means responsive to activation of the initiation switch and to output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.	The MIC2000 control panel prevents the stepper and mixing motors from operating unless a cup of appropriate size is detected in the cup-receiving holder and the user presses the “START” button on the control panel (Shake Shop Express videos; HBBF 25, HBBF28 “Blending or Mixing Instructions”, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
9. The apparatus of claim 1 further comprising: a cup sensor for detecting a characteristic of a cup in the cup	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size is present in the cup-receiving holder and for

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support and for producing an output corresponding to the characteristic of the cup; and	producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispenser being responsive to the liquid dispensing control signals to dispense liquid into the cup.	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the control panel will direct the MIC2000 to dispense an appropriate amount of water into a Hershey cup positioned in the cup receiving holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; physical inspection of MIC2000)
11. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes contained in a Hershey cup (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; Williams Dep.; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to hold its motor and blending components (Shake Shop Express videos; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 has a cup holder mounted to the blender housing (Shake Shop Express videos; HBBF25, “Cup Holder”; HBBF43; Williams Dep.; physical inspection of MIC2000)
a rotatable blade assembly mounted within the housing,	The Hamilton Beach MIC2000 has a rotatable blade assembly mounted within the blender housing (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)

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the blade assembly including shaving elements and aeration elements,	The Hamilton Beach MIC2000 has a mixing blade assembly of slim cross-sectional profile with a sharp depressed edge for shaving the frozen Hershey milkshake and a curved, wave-like shape for aerating the frozen Hershey milkshake (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade assembly movable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom.	Through use of a stepper motor, the mixing blade assembly in the Hamilton Beach MIC2000 is moveable between upper and lower blade positions, the lower blade position reaching the bottom of the Hershey cup when the Hershey cup is in the MIC2000 cup holder (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
12. The apparatus of claim 11 characterized further in that the blade assembly includes at least one surface area shaped to pump fluid toward the bottom of the cup in response to rotation of the blade assembly.	The MIC2000 rotatable blade assembly is designed to pump milkshake toward the bottom of the Hershey cup during rotation (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; Williams Dep.; physical inspection of MIC2000)
13. The apparatus of claim 11 wherein the blade assembly shaving elements and aeration elements are in close vertical proximity to one another.	The sharp depressed edges for shaving and curved, wave-like shape for aerating on the Hamilton Beach cutting blade assembly are in close vertical proximity to one another (HBBF322, HBBF441; physical inspection of MIC2000)
14. The apparatus of claim 11 wherein the aeration elements include first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade assembly in a fluid the aeration elements cause alternatively high and low pressure zones in the fluid, and thus create turbulent eddies which cause a whipping effect.	The aeration elements of the Hamilton Beach MIC2000 include regions which are spaced apart and on different planes, such that rotation of the aeration elements in the Hershey milkshake cause alternately high and low pressure zones in the milkshake and thus create turbulent eddies which cause a whipping effect (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)

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18. The apparatus of claim 11 wherein the apparatus further includes control means for causing the blade assembly to move between the upper and lower blade positions at least twice.	The Hamilton Beach MIC2000 has a control panel which directs the mixing blade assembly between the upper and lower blade positions at least twice during the mixing and rinsing processes (Shake Shop Express videos; HBBF28, “Blending or Mixing Instructions”; HBBF25 “Control Panel/Display”; Williams Dep.; physical inspection of MIC2000)
19. The apparatus of claim 11 further including: an initiation switch configured to produce an output when activated by a user;	The Hamilton Beach MIC2000 has a “START” button on its control panel to produce an output signal for initiation of the blending process when the “START” button is pressed by the user (Shake Shop Express videos; HBBF25, “Control Panel/Display”; HBBF28, “Blending or Mixing Instructions”; Williams Dep.; physical inspection of MIC2000)
a cup sensor for detecting the presence of a cup in the cup support and for producing an output;	The Hamilton Beach MIC2000 has a cup sensor to detect the presence of a cup in the cup holder and convey that information to the control circuitry (Shake Shop Express videos; HBBF25, “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means responsive to activation of the initiation switch and to the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch.	After the user presses the “START” button on the control panel and the cup sensor confirms to the control panel after detection that a cup is present in the cup holder, the MIC2000 control panel will cause the mixing blade to rotate and be lowered into the Hershey cup (Shake Shop Express videos; HBBF25, “Control Panel/Display”; HBBF28, “Blending or Mixing Instructions”; Williams Dep.; physical inspection of MIC2000).
20. The apparatus of claim 11 further comprising: a threaded guide rod mounted within the housing;	The Hamilton Beach MIC2000 has threaded lead screws mounted within the housing Williams Dep.; physical inspection of MIC2000)

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a slidable and rotatable blade shaft having the blade assembly attached thereto,	The Hamilton Beach MIC2000 mixing blade assembly is attached to a rotatable mixing shaft that is slidable up and down with respect to the Hershey cup and the MIC2000 splash shield (HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade shaft drivable between upper and lower positions by rotation of the threaded guide rod; and	The Hamilton Beach MIC2000 rotatable mixing shaft is drivable up and down by rotation of the threaded lead screws (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
a first motor coupled to the threaded rod for driving the slidable and rotatable blade shaft between upper and lower positions corresponding to the upper and lower blade positions.	The Hamilton Beach MIC2000 has a stepper motor for driving the rotatable mixing shaft up and down in positions corresponding to the upper and lower mixing blade positions (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
21. The apparatus of claim 20 wherein: the apparatus further includes control means for generating slidable blade shaft rotation control signals,	The MIC2000 control panel generates signals to control the operation of the rotatable mixing blade assembly, which is slidable with respect to the Hershey cup and the MIC2000 splash shield (Shake Shop Express videos; HBBF25, HBBF27; Williams Dep.; physical inspection of MIC2000)
the first motor responsive to the slidable blade shaft movement control signals to move the slidable blade shaft between the upper and lower positions; and	The (first) stepper motor is responsive to blade movement control signals from the MIC2000 control panel to move the shaft between upper and lower positions (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
a second motor responsive to the blade rotation control signals to rotate the blade assembly	The (second) mixing motor is responsive to blade rotation control signals from the MIC2000 control panel to rotate the blade assembly (Shake Shop Express videos; Williams Dep.; physical inspection of

U.S. Patent No. 5,803,377	Comments
	MIC2000)
22. The apparatus of claim 21 wherein: the apparatus further comprises an initiation switch and a cup sensor for detecting the presence of a cup in the cup support and for producing an output; and	On its control panel, the Hamilton Beach MIC2000 has a “START” button to initiate the mixing/blending process and a cup sensor for detecting whether a cup of appropriate size resides in the cup-receiving holder, both producing an output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF25, HBBF28, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
the control means is further for generating the blade movement control signals in response to activation of the initiation switch and the output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.	The MIC2000 control panel prevents the blade assembly from rotating and being lowered into the Hershey cup unless a cup of appropriate size is detected in the cup-receiving holder and the user presses the “START” button on the control panel (Shake Shop Express videos; HBBF 25, HBBF28 “Blending or Mixing Instructions”, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
25. The apparatus of claim 11, further comprising a cup sensor for detecting a characteristic of a cup in the cup support and for producing an output corresponding to the characteristic of the cup; and	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size resides in the cup-receiving holder and for producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispensing being responsive to the liquid dispensing control signals.	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the control panel will direct the MIC2000 to dispense an appropriate amount of water into a Hershey cup positioned in the cup receiving holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; physical inspection of MIC2000)
27. An apparatus for making frozen drinks from a	The Hamilton Beach MIC2000 is an apparatus for making frozen

U.S. Patent No. 5,803,377	Comments
frozen substance frozen into a cup, comprising:	milkshake drinks from frozen milkshakes frozen in a Hershey cup (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to hold its motor and blending components (Shake Shop Express videos; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 blender has a cup holder mounted to the blender housing (Shake Shop Express videos; HBBF25, “Cup Holder”; HBBF43; Williams Dep.; physical inspection of MIC2000)
a liquid dispenser having an outlet positioned to direct a predetermined volume of liquid into a cup position in the cup support;	The Hamilton Beach MIC2000 blender has a liquid dispenser with an outlet positioned to dispense a predetermined volume of water into a Hershey cup positioned in the cup holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; physical inspection of MIC2000)
a shaft mounted to the housing the shaft carrying a rotatable blade having shaving elements and aeration elements formed thereon,	The Hamilton Beach MIC2000 blender has a mixing shaft mounted in the housing (through its connection to a mixing motor) and carries a rotatable mixing blade of slim cross-sectional profile at its distal end having shaving elements (sharp depressed edges) and aeration elements (curved, wave-like surfaces) formed thereon (HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the shaft moveable relative to the housing to carry the blade between an upper blade position remote from the cup support and a lower blade position adjacent to	The Hamilton Beach MIC2000 mixing shaft is movable relative to the housing so that the mixing blade at its distal end is carried between an upper blade position remote from the cup support to a lower blade

U.S. Patent No. 5,803,377	Comments
the cup support,	position adjacent to the cup support (Shake Shop Express videos; Williams Dep. physical inspection of MIC2000)
the blade configured to, when it is lowered into a cup containing frozen substance, shave the frozen substance, mix the frozen substance with liquid dispensed by the liquid dispenser, and incorporate air into the formed mixture of frozen substance and liquid.	The Hamilton Beach MIC2000 mixing blade is configured to, when it is lowered into the Hershey cup with its frozen milkshake, shave the frozen milkshake (with its sharp depressed edges), mix the frozen milkshake with water dispensed from the water dispenser, and incorporate air (with its curved, wave-like surfaces) into the formed slurry of frozen milkshake and water ((Shake Shop Express videos; HBBF29, “Water Scale”; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)

CERTIFICATE OF SERVICE

I hereby certify that on January 29, 2018, copies of the foregoing were caused to be served upon the following in the manner indicated:

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/s/ Michael J. Flynn

Michael J. Flynn (#5333)

EXHIBIT D

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)
RICH PRODUCTS CORPORATION,)
Plaintiffs,)
-vs-) C.A. No. 16-41 (GMS)
CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)
HERSHEY CREAMERY COMPANY and)
PAUL MILLS d/b/a MILLS BROTHERS)
MARKETS,)
Defendants.)

HIGHLY CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER
VIDEOTAPED DEPOSITION OF BRIAN P. WILLIAMS
8:56 a.m. to 6:04 p.m.
December 13, 2017
Glen Allen, Virginia

REPORTED BY:
Rhonda D. Tuck, RPR, CRR
Job No. 2761269
Pages 1 - 226

1 Videotaped deposition of BRIAN P.
2 WILLIAMS, taken and transcribed on behalf of the
3 Plaintiffs, by and before Rhonda D. Tuck, RPR, CRR,
4 Notary Public in and for the Commonwealth of
5 Virginia at large, pursuant to Rule 30 of the
6 Federal Rules of Civil Procedure, and by Notice to
7 Take Depositions; commencing at 8:56 a.m.,
8 December 13, 2017, at Hilton Garden Inn, 4050 Cox
9 Road, Glen Allen, Virginia.

10
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19 BY: WILLIAM S. FOSTER, JR., ESQUIRE

20
21 ALSO PRESENT:

22 Scott Pinzone, Hamilton Beach

23 Ray Graham - Videographer

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 A. That's what it says on the first page. 01:56

2 Q. And you read it over before it got filed, 01:56

3 right? 01:56

4 A. I would have, yes. 01:56

5 Q. Well, why was this guide rod weight added 01:56

6 for the MIC2000? 01:56

7 A. It was added for the MIC2000 because we 01:56

8 had issues with this shield assembly binding in the 01:56

9 bushings that the guide rods pass through, and there 01:57

10 was some noise from vibration. 01:57

11 Q. And why wasn't the guide -- was there -- 01:57

12 let me strike that question. 01:57

13 How heavy is the guide rod weight in the 01:57

14 MIC2000? 01:57

15 A. I'll have to go back and look at some 01:58

16 files to get that information. I don't know off the 01:58

17 top. 01:58

18 Q. Can you tell me approximately? A pound? 01:58

19 Five pounds? 01:58

20 MR. FOSTER: Objection. Calls for 01:58

21 speculation. 01:58

22 THE WITNESS: I'd rather look at the 01:58

23 documentation and give you an exact weight. 01:58

24 BY MR. CHAMBERS: 01:58

25 Q. Is the guide rod weight a lead weight in 01:58

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 the MIC2000? 01:58

2 A. It's cast iron. 01:58

3 Q. Was Hamilton Beach choosing a 01:58

4 high-density material for the guide rod weight? 01:58

5 MR. FOSTER: Objection. Vague. 01:58

6 THE WITNESS: I don't understand the 01:58

7 question. 01:58

8 BY MR. CHAMBERS: 01:58

9 Q. Well, it wasn't using Styrofoam, was it? 01:58

10 A. Correct. 01:58

11 Q. The idea was to put something dense, a 01:59

12 dense, heavy material, right? 01:59

13 A. Correct. 01:59

14 Q. And the guide rod weight adds to the 01:59

15 weight of the cup shield, right? 01:59

16 MR. FOSTER: Objection. Mischaracterizes 01:59

17 the witness's testimony. 01:59

18 THE WITNESS: The addition of the weight 01:59

19 makes this entire assembly heavier. 01:59

20 BY MR. CHAMBERS: 01:59

21 Q. And the entire assembly is a cup shield 01:59

22 assembly, right? 01:59

23 MR. FOSTER: Objection. Mischaracterizes 01:59

24 the witness's prior testimony. 01:59

25 THE WITNESS: It's referred to as a mix 01:59

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 that when you had the brainstorming meetings about 02:07
2 this binding problem that a motor-driven shield was 02:07
3 not considered as a possible solution? 02:08
4 MR. FOSTER: Objection to the extent it 02:08
5 mischaracterizes the witness's prior testimony. 02:08
6 THE WITNESS: I don't recall it being 02:08
7 considered. 02:08
8 BY MR. CHAMBERS: 02:08
9 Q. All right. In addition to the binding of 02:08
10 the mix shield, you also mentioned there was noise 02:08
11 from vibration. 02:09
12 Can you explain what that problem was? 02:09
13 A. That was just the shield assembly 02:09
14 vibrating within the guide rod bushings, as well. 02:09
15 Q. Is that related to the binding problem, 02:09
16 that it was getting stuck on one side of the 02:09
17 bushings or the other and causing vibration? 02:09
18 A. That's not necessarily related to the 02:09
19 binding, no. 02:09
20 Q. So when the mixer cup shield is in a 02:10
21 lower position, the only thing inhibiting press -- 02:10
22 moving the mix shield upward is the weight of the 02:10
23 guide rod weight in the mix shield itself, right? 02:10
24 MR. FOSTER: Objection. Mischaracterizes 02:10
25 the witness's prior testimony. Lack of 02:10

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 foundation. 02:10

2 THE WITNESS: The only thing -- there's 02:10

3 several things that inhibit moving it upwards. 02:10

4 The weight would be one. You'd also have the 02:10

5 friction inside the bushings, and you'd have the 02:10

6 friction of the spindle seal. 02:11

7 BY MR. CHAMBERS: 02:11

8 Q. Are the bushings shown in Exhibit 13? 02:11

9 A. No. 02:11

10 Q. Is the spindle seal shown in Exhibit 13? 02:11

11 A. Not the spindle seal that's used for 02:11

12 production. 02:12

13 Q. So if you go to a MIC2000 and you reach 02:12

14 your hand up and push up on the mix shield, you can 02:12

15 move it up, can't you? 02:12

16 A. If you overcome the resistance of the 02:12

17 bushings, spindle seal and the weight. 02:12

18 Q. And the MIC2000 was designed so that 02:12

19 there would not be a lot of friction with the 02:12

20 spindle shield or the bushings, correct? 02:12

21 MR. FOSTER: Objection. Foundation. 02:13

22 THE WITNESS: The spindle seal requires 02:13

23 friction to work, so there will always be 02:13

24 friction there. 02:13

25 BY MR. CHAMBERS: 02:13

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1 sales. 03:03

2 Is that the way you understand that first 03:03

3 paragraph? 03:03

4 A. You'll have to ask Zachary Waite what he 03:03

5 meant by that. I didn't write it. 03:03

6 Q. Then in the second paragraph, the second 03:03

7 to last sentence, the paragraph starting, "In the 03:03

8 near term," it says, "We are hoping to use the 03:03

9 standard cup to keep costs down and have it clamped 03:03

10 in the machine or held in place from the top as the 03:04

11 impeller is lowered down." 03:04

12 Do you see that? 03:04

13 A. I do. 03:04

14 Q. Now, does the splash shield with the 03:04

15 guide weight on top in the MIC2000 hold the Hershey 03:04

16 cup in place as the impeller is lowered down? 03:04

17 A. Does the splash shield hold the... 03:04

18 No, it does not hold the cup out as the 03:04

19 impeller is lowered. 03:04

20 Q. Well, isn't the -- the mix shield or 03:04

21 splash shield on the MIC2000 rests on top of the 03:04

22 Hershey cup, doesn't it? 03:04

23 A. Yes. 03:04

24 Q. And that has a cast iron weight on it, 03:04

25 doesn't it? 03:05

HIGHLY CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

1 MR. FOSTER: Objection. Form. Vague. 03:05

2 THE WITNESS: The shield assembly has a 03:05

3 cast iron weight on the top of the guide rods. 03:05

4 BY MR. CHAMBERS: 03:05

5 Q. So isn't it true that the MIC2000 shield 03:05

6 with the cast iron weight on top helps keep the cup 03:05

7 down, and in place? 03:05

8 MR. FOSTER: Objection. Mischaracterizes 03:05

9 the witness's prior testimony. Vague. 03:05

10 THE WITNESS: Does it help keep the cup 03:05

11 down in place. Any small amount of weight will 03:05

12 help, but it's not sufficient. 03:05

13 BY MR. CHAMBERS: 03:05

14 Q. And then in the next paragraph it talks 03:05

15 about "How about the addition of water to the cup?" 03:06

16 Do you see that? 03:06

17 A. I do. 03:06

18 Q. And in the research that had been 03:06

19 conducted on the f'real machine, had you been able 03:06

20 to determine that f'real was adding water to the 03:06

21 cup? 03:06

22 A. No, I don't think there was research done 03:06

23 to determine that. 03:06

24 Q. You don't remember any discussion with 03:06

25 Hershey about whether f'real added water to their 03:06

1 COMMONWEALTH OF VIRGINIA AT LARGE, to wit:

2
3 I, Rhonda D. Tuck, RPR, CRR, Notary Public in and
4 for the Commonwealth of Virginia at Large, and whose
5 commission expires on May 31, 2020, do certify that the
6 aforementioned appeared before me, was sworn by me, and
7 was thereupon examined by counsel; and that the foregoing
8 is a true, correct, and full transcript of the testimony
9 adduced.

10 I further certify that I am neither related to nor
11 associated with any counsel or party to this proceeding,
12 nor otherwise interested in the event thereof.

13 Given under my hand and notarial seal at
14 Charlottesville, Virginia, this 29th day of December,
15 2017.

16
17
18
19
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22
23 _____
24 Rhonda D. Tuck, RPR, CRR

25 Notary Public Registration No. 224847

Commonwealth of Virginia at Large

EXHIBIT E

CONFIDENTIAL

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and
RICH PRODUCTS CORPORATION,

Plaintiffs,

v.

C.A. No. 16-41 (GMS)

CONSOLIDATED

HAMILTON BEACH BRANDS, INC, et al.,
Defendants.

C O N F I D E N T I A L

Complete transcript of the
videotaped deposition of BENJAMIN H. BRANSON, III, taken
at the instance of the Plaintiff, before Wanda T. Blanks,
a Court Reporter and Notary Public for the State of Virginia
at Large, on July 10, 2018, beginning at 9:45 a.m., at the
Hyatt Place, 4100 Cox Road, Glen Allen, Virginia; said
deposition taken pursuant to the Federal Rules of Civil
Procedure.

PAGES 1 - 114

Page 1

CONFIDENTIAL

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7 DRINKER, BIDDLE & REATH, LLP

8 1500 K Street, N.W., Washington, DC 20005,

9 By: Williams S. Foster, Jr., Esq., Counsel for Defendant

10 Hamilton Beach Brands, Inc.;

11
12 BARLEY SNYDER, LLP

13 213 Market Street, 12th Floor, Harrisburg, PA 17101,

14 By: Williams C. Boak, Esq., Counsel for Defendant Hershey

15 Creamery Company.

16
17 ALSO PRESENT:

18
19 Scott Pinzone, Hamilton Beach Brands;

20 Bevin Armistead, videographer.

CONFIDENTIAL

1 type of cup?

2 A. Correct.

3 Q. And we talked a little bit about the cup shield
4 today, right?

5 A. Uh-huh.

6 Q. Or what do you call it? The guard? What's your
7 reference?

8 A. It's the cup guard assembly in my world.

9 Q. And does the cup guard assembly include
10 a cup guard?

11 A. Yes. That would be the top.

12 Q. What do you mean by the top?

13 A. That would be the, the part that's pointed
14 in Branson 25 I believe that's says F. Oh, gosh. I can't
15 read it. F6?

16 Q. Okay. So is part -- would part D restrain
17 the upward movement of part F6 in Branson Exhibit 25 which
18 is labeled HBBF0000122?

19 MR. CHAMBERS: Objection. Confusing.

20 A. Would it restrict the upward movement?

21 Q. Would it restrain it?

22 A. Only by weight.

23 Q. But that's a way other than the weight
24 of F6, isn't it?

25 A. Yes.

CONFIDENTIAL

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RE CROSS-EXAMINATION

BY MR. FOSTER:

Q. Mr. Branson, you talked about the Trelleborg seal, right?

A. Yes.

Q. But it does provide some friction?

A. Yes, it does.

Q. That would restrict the upward movement of the cup guard?

A. Yes, it does. It has to.

MR. FOSTER: That's all I have.

Mr. Boak?

MR. BOAK: I have no questions.

MR. CHAMBERS: Thank you, Mr. Branson.
You had your first deposition done.

THE DEPONENT: Wow.

AND FURTHER THIS DEPONENT SAITH NOT.

NOTE: The deposition concluded
at 3:33 p.m.

CONFIDENTIAL

COMMONWEALTH OF VIRGINIA,
COUNTY OF HANOVER, to-wit:

I, Wanda T. Blanks, a Notary
Public for the Commonwealth of Virginia at Large, do
hereby certify that the foregoing deposition of Benjamin
H. Branson, III, was duly taken and sworn to before me
at the time and place set out in the caption hereto.

Further, that the transcript
is, to the best of my ability, a true and correct record
of the proceedings.

Given under my hand this 19th
day of July 2018.

<%signature%>

WANDA T. BLANKS

Notary Registration No. 277067

My Commission expires:
August 31, 2019.

EXHIBIT F



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January 30, 2017

VIA E-MAIL ONLY

(gchambers@sideman.com)

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Re: *f'real Foods LLC et al. v Hamilton Beach Brands, Inc. et al.*
Civ. No. 16-41-GMS (consolidated)

Dear Guy:

Given recent developments at the U.S. Patent and Trademark Office ("PTO") related to the above-referenced litigation, and in view of the counterclaims, your client f'real Foods LLC risks adverse action and potential sanctions including attorney's fees if it continues its infringement action against Hamilton Beach.

At this stage of the case, recent PTO decisions have greatly impacted f'real's ability to assert three of the patents-in-suit. In addition, Hamilton Beach found invalidating prior art for the fourth patent-in-suit and has filed two additional Petitions for *Inter Partes* Review ("IPR"). See, e.g., IPR2017-00756, IPR2017-00765. Each of these issues with f'real's case is discussed in detail below. Hamilton is providing f'real notice that continued assertion of the patent counts in view of these developments will not only make the case exceptional under 35 U.S.C. § 285 but will also unnecessarily multiply the proceedings to justify sanctions under 28 U.S.C. § 1927.¹ Rather than heading down this path where both sides spend millions on wasteful litigation, Hamilton Beach urges that your client consider dismissing this action.²

¹ f'real's track record here is not good as its trade dress and unfair competition counts did not even survive the pleadings stage. Also, f'real's trademark allegations are dubious at best as discovery has shown that f'real acknowledges it has no evidence of alleged confusion whatsoever, and thereby raises issues whether it has met its obligations under Rule 11 to assert the trademark counts.

² f'real has already had one false start when it failed to conduct an adequate pre-filing investigation and failed to inform you that it did not even own the asserted patents. Fortunately, we discovered this oversight before the Court made any substantive rulings in the case.

DrinkerBiddle&Reath

Guy Chambers, Esq.

January 30, 2017

Page 2

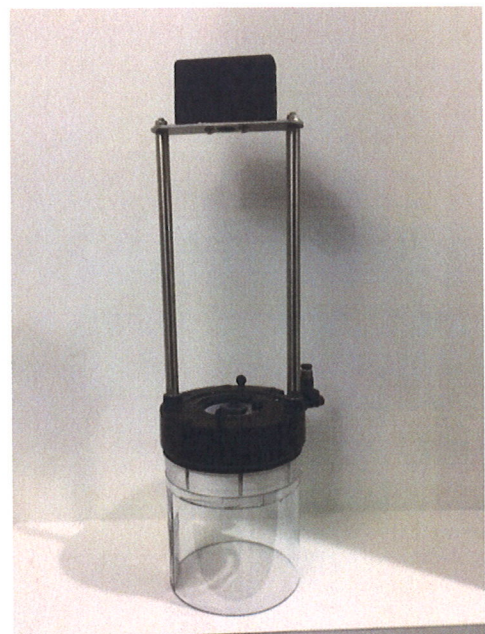
1. U.S. Patent No. 5,803,377

As we previously informed you, the PTO ordered *ex parte* reexamination of the '377 Patent. Because the '377 Patent is expired, there will be no opportunity to amend the claims. It is well-established in the prosecution history of the '377 patent that the claims were allowed because the prior art supposedly lacked "a rotatable blade including both shaving elements and aeration elements ... [, or] a rotatable blade having shaving elements and aeration elements formed thereon." Decision on Request for Reexamination at 5, Reexamination Control No. 90/013,850 (December 9, 2016). But U.S. Patent No. 3,147,958 to Stiffler clearly discloses such an arrangement and notes that each of Stiffler's knife 10 and wheel 40 provides aeration of fluid. Since f'real now knows the only grounds for patentability is disclosed by the prior art cited in the *ex parte* reexamination, f'real no longer has a credible basis for asserting this patent.

2. U.S. Patent No. 7,520,658

f'real's press release describing how the Patent Trial and Appeals Board ("PTAB") affirmed its rights in the '658 Patent by denying institution of IPR left out the important detail how the PTAB rejected f'real's claim construction of "unrestrained" as even too broad under the Broadest Reasonable Interpretation ("BRI") standard used at the PTAB. Instead, the PTAB construed the term as "without any other mechanical means of restraining the upward sliding movement of the splash shield on the shaft, ***apart from the mass or weight of the splash shield itself.***" IPR2016-01105, Paper No. 10 at 23 (emphasis added). Even under the broadest reasonable construction of "unrestrained" based on f'real's disclaimer of subject matter during prosecution, Hamilton Beach cannot infringe the '658 Patent.

As shown on the right, Hamilton Beach's accused MIC2000 product includes a number of structures that "restrain" the splash shield that covers the opening of the cup. Specifically, Hamilton Beach provides a separate weight that restrains the splash shield and is "apart from the mass or weight of the splash shield itself." Similarly, Hamilton Beach includes a pair of support arms that stabilize the splash shield like support element 26 of Nielson, and thus, the "rigid structure" of the MIC2000 "would restrain against upward movement of the lid after it is lowered into engagement with the receptacle" along with the added weight. IPR2016-01105, Paper No. 10 at 23. Having possessed an MIC2000 for more than one and a half years,



DrinkerBiddle&Reath

Guy Chambers, Esq.

January 30, 2017

Page 3

f'real knows full well that it lacks an "unrestrained" splash shield as construed by the PTAB under the BRI standard. Moreover, f'real cannot broaden the claim construction of "unrestrained" to read on the MIC2000 in the district court action after seeking a narrower construction to avoid the art cited in the IPR petition.

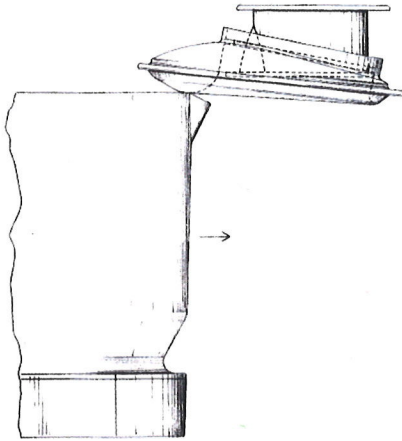
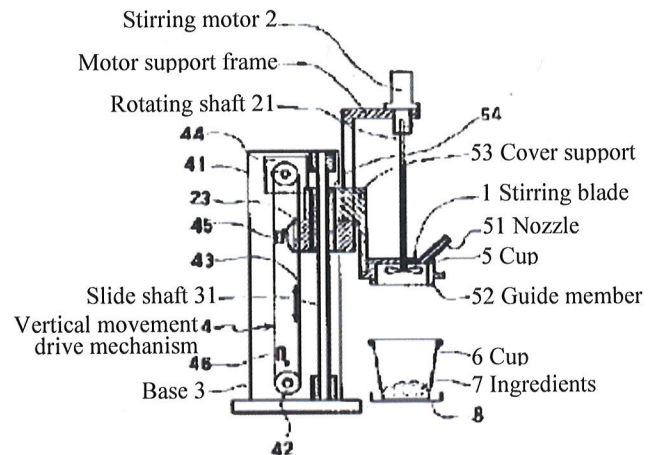


FIG. 12

Furthermore, the PTAB confirmed that Hamilton Beach may seek IPR of the asserted patents up to January 29, 2017, when f'real accepted service of the instant action. Thus, Hamilton Beach filed another IPR Petition (IPR2017-00765) based on recently discovered prior art directed to an "unrestrained" splash shield in view of the PTAB's narrowing claim construction. Specifically, U.S. Patent No. 6,164,575 to Karkos discloses a weighted cover 30 that ensures it is seated on blender cup 25 when ice is provided through ice chute 24 or the blender is activated to blend the ingredients in cup 25. Karkos, Col. 4, Lines 46-67. As shown on the left, cover 30 of Karkos is unrestrained from moving along ice chute 24 save the weight of the cover itself. Karkos, Figs. 11-14.

In addition, Hamilton Beach also relied upon JP H04-136787 U to Sato *et al.* Sato discloses a cup cover 5 that slides unrestrained along a shaft 21 carrying stirring member 1. The movement of a motor support frame 22 against cover support 53 moves cover 5 in a vertical direction. When cover 5 is lowered to engage cup 6, motor support frame 22 separates from cover support 53, such that support 53 and cover 5 are unrestrained in an upward direction along respective shafts 31, 21.



Each of the Karkos and Sato references provides a new ground of obviousness based on prior art not previously available to Hamilton Beach and not presented to the PTAB or PTO, and thus, the IPR will most likely go forward. In any event, these references ensure that Hamilton Beach will be certain to invalidate the asserted claims of the '658 Patent in the district court action, even under the PTAB's narrow claim construction of "unrestrained."

DrinkerBiddle&Reath

Guy Chambers, Esq.

January 30, 2017

Page 5

Hamilton Beach's IPR petition clearly demonstrates a "reasonable likelihood that the petitioner would prevail" with respect to the asserted claims of the '150 Patent.

* * *

As you know, Hamilton Beach will vigorously defend itself against unwarranted allegations of patent infringement. In addition to the challenges to all four patents-in-suit, Hamilton Beach has brought credible antitrust claims based on ample evidence of inequitable conduct that the Court considers plausible and supported by allegations of specific facts. We respectfully submit that it is your client's best interest to dismiss the case now and focus on competing in the marketplace. Otherwise, f'real will not only be wasting substantial resources in litigation, but will also be risking its patent portfolio and exposing itself to potential sanctions, such as attorney's fees, for making the case exceptional and for multiplying the proceedings.

Respectfully,



William S. Foster, Jr.

WSF/

cc: Rodger D. Smith II, Esq.
Francis DiGiovanni, Esq.

EXHIBIT G

IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

- - -

OREXO AB and OREXO US, : CIVIL ACTION
INC., :

Plaintiffs, :

vs. :

ACTAVIS ELIZABETH LLC, :
ACTAVIS PHARMA, INC., TEVA :
PHARMACEUTICALS USA, INC., :
and TEVA PHARMACEUTICAL :
INDUSTRIES, LTD., :

Defendants. : NO. 17-205 (CFC)

- - -

Wilmington, Delaware
Monday, March 11, 2019
10:0 o'clock, a.m.

- - -

BEFORE: HONORABLE COLM F. CONNOLLY, U.S.D.C.J.

- - -

APPEARANCES:

MORRIS, NICHOLS, ARSHT & TUNNELL LLP
BY: DEREK FAHNESTOCK, ESQ.

-and-

Valerie J. Gunning
Official Court Reporter

1 APPEARANCES (Continued):

2 MILBANK, TWEED, HADLEY & McCLOY LLP

3 BY: ERROL TAYLOR, ESQ.,
4 FREDERICK M. ZULLOW, ESQ.,
5 JORDAN P. MARKHAM, ESQ.,
6 ANNA BROOK, ESQ.,
7 NATHANIEL T. BROWAND, ESQ.,
8 KYANNA LEWIS SABANOGLU, ESQ. and
9 VENUS ALLAHYARZADEH, ESQ.
(New York, New York)

10 Counsel for Plaintiffs

11 PHILLIPS, GOLDMAN, McLAUGHLIN & HALL, P.A.
12 BY: DAVID A. BILSON, ESQ.

13 -and-

14 WINSTON & STRAWN LLP

15 BY: GEORGE C. LOMBARDI, ESQ.,
16 IVAN POULLAOS, ESQ. and
17 NIMALKA WICKRAMASEKERA, ESQ.
(Chicago, Illinois)

18 Counsel for Defendants

19 - - -
20
21
22
23
24
25

1 the method parts of it other than the fact that their
2 product did not meet the claim elements. They didn't
3 talk about intent. They didn't talk about knowledge or
4 anything.

5 THE COURT: Well, they denied it. I mean, the
6 burden of proof is on you.

7 MR. TAYLOR: Absolutely.

8 THE COURT: They're denying it.

9 MR. TAYLOR: Absolutely. And we put evidence in
10 to meet our burden. The question here is whether defendants
11 with this kind of notice are entitled to now put in a whole
12 case on lack of intent like we're seeing in the Jones --

13 THE COURT: So that's why I said let's talk when
14 you. When you got up here --

15 MR. TAYLOR: Right.

16 THE COURT: -- I referred you to the Jones
17 affidavit. I'm troubled by the Jones affidavit.

18 MR. TAYLOR: Right.

19 THE COURT: What other specific pieces of
20 evidence, if any, are you trying to preclude them from
21 introducing at trial?

22 MR. TAYLOR: It's primarily the evidence and the
23 facts that are in Jones, Your Honor.

24 And --

25 THE COURT: Well, you said primarily. I mean,

EXHIBIT H

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC, and RICH)
PRODUCTS CORPORATION,)

Plaintiffs,)

vs.) Case No.

) 16-41-GMS

HAMILTON BEACH BRANDS, INC.,)

HERSHEY CREAMERY COMPANY and)

PAUL MILLS d/b/a MILLS)

BROTHERS MARKETS,)

Defendants.)

-----)

HIGHLY CONFIDENTIAL

VIDEOTAPED DEPOSITION OF JENS VOGES

San Francisco, California

Wednesday, June 13, 2018

Volume I

Veritext Legal Solutions

Mid-Atlantic Region

1250 Eye Street NW - Suite 350

Washington, D.C. 20005

Veritext Legal Solutions

215-241-1000 ~ 610-434-8588 ~ 302-571-0510 ~ 202-803-8830

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC, and RICH)
PRODUCTS CORPORATION,)

Plaintiffs,)

vs.) Case No.

) 16-41-GMS

HAMILTON BEACH BRANDS, INC.,)

HERSHEY CREAMERY COMPANY and)

PAUL MILLS d/b/a MILLS)

BROTHERS MARKETS,)

Defendants.)

-----)

VIDEOTAPED DEPOSITION OF JENS VOGES,
Volume I, taken on behalf of Defendant Hamilton
Beach Brands, Inc., at One Embarcadero Center,
San Francisco, California, beginning at 9:47 a.m.,
and ending at 4:20 p.m., on Wednesday, June 13,
2018, before CARLA SOARES, Certified Shorthand
Reporter No. 5908.

1 APPEARANCES:

2
3 For the Plaintiffs:

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5 BY: GUY W. CHAMBERS

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13 For the Defendant Hamilton Beach Brands, Inc.:

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15 BY: WILLIAM S. FOSTER, JR.

16 Attorney at Law

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1 APPEARANCES (Continued):

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12
13
14 ALSO PRESENT: Cyril Suszckiewicz, Video Operator

15
16 --o0o--

1 F'real self-cleaning blender?

2 A Yes.

3 Q Okay. Can I direct your attention to
4 paragraph 20, please, starting on page 14?

5 Do you see a line where it talks about
6 "During F'real's negotiations with QuikTrip in the
7 2001 time frame"?

8 A Yes.

9 Q Who was involved in those negotiations on
10 behalf of F'real?

11 A I believe it would have been Jim Farrell,
12 and I would, again, refer you to his deposition.

13 Q And then with respect to QuikTrip, who
14 participated in those negotiations with QuikTrip?

15 A Again, I would refer you to Jim's
16 deposition.

17 Q How did you personally learn about these
18 2001 negotiations to testify about them in the
19 declaration?

20 A I think the answer is very consistent with
21 what I mentioned earlier, kind of referring back to
22 my statement right at the beginning where I said I'm
23 submitting this declaration based on my knowledge of
24 the corporate knowledge.

25 So again, Jim described to us that --

1 those interactions, you know, especially the comment
2 that, "Hey, if it was a self-serve piece of
3 equipment, that it would be something of interest to
4 QuikTrip."

5 Q Just to confirm, it was based on
6 discussions that you learned about the 2001 --

7 MR. CHAMBERS: Objection.

8 BY MR. FOSTER:

9 Q -- negotiations?

10 A I mean, I think these are conversations
11 that we had over time, and were over and over again
12 confirmed.

13 I mean, it's not something that is a
14 secret. This was the history of F'real.

15 Q Sorry. I'm just trying to confirm that
16 there's documents that exist. So it appears to be
17 an oral history that was passed down.

18 A Yeah, I mean, it was a trade show. They
19 were at a booth talking to each other. It wasn't
20 recorded. There was no lawyer present.

21 Q Do you know when Mr. Farrell told QuikTrip
22 he could deliver a self-serve blender?

23 A I don't know that level of detail. I just
24 know that in the end, two units were delivered right
25 before -- I was told that two units were delivered

1 right before the 4th of July weekend.

2 Q Who made the B2 units that were delivered
3 to QuikTrip?

4 A I think it was a team effort.

5 Q What do you mean by "a team effort"?

6 A So there was a design firm that Jim worked
7 together with to help build these blenders, and
8 there are photos of multiple people building these
9 completed, some of them from Kablooe, and some of
10 them, you know, Jim personally.

11 Q Was Mr. Geppert on that team at Kablooe?

12 A Yes.

13 Q For the record, that's Andrew Geppert.

14 Do you see on page 15 there's a sentence
15 that says, "When QuikTrip saw the B2 blender, they
16 recognized that the splash shield was designed to
17 minimize splatter by covering almost the entire cup
18 opening and that whatever splatter was created on
19 the lower side of the B2 splash shield would be
20 quickly and reliably cleaned off after every
21 milkshake"?

22 Where did you get that information for
23 your declaration?

24 A That was just factual in terms of that is
25 what the blender did when it was delivered to

1 QuikTrip.

2 Q It says "they recognized." So who at
3 QuikTrip recognized the splash shield was designed
4 to minimize splatter?

5 A I mean, everyone that, you know, was part
6 of the installation program, anyone who was
7 observant of the blender.

8 Q Do you know of anyone that was on that --
9 strike that.

10 Do you know anyone that was part of that
11 installation program back in 2003?

12 A No. I think it's clear that I was not
13 part of F'real at that time.

14 Q And you mentioned before, you said, "Where
15 I lack personal knowledge, as a corporate
16 representative of F'real based upon F'real's
17 corporate records and its corporate knowledge."

18 Did you do the same sort of activities in
19 talking to people and reviewing documents to prepare
20 for this 30(b)(6) deposition today?

21 MR. CHAMBERS: Objection. Asked and
22 answered.

23 THE WITNESS: I think I described at the
24 beginning of this deposition what -- how I prepared.

25 ///

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby
3 certify:

4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were administered an oath; that
8 a record of the proceedings was made by me using
9 machine shorthand which was thereafter transcribed
10 under my direction; that the foregoing transcript is
11 a true record of the testimony given.

12 Further, that if the foregoing pertains to
13 the original transcript of a deposition in a Federal
14 Case, before completion of the proceedings, review
15 of the transcript [] was [x] was not requested.

16 I further certify I am neither financially
17 interested in the action nor a relative or employee
18 of any attorney or any party to this action.

19 IN WITNESS WHEREOF, I have this date
20 subscribed my name.

21
22 Dated: _____

23 
24

25 CARLA SOARES

CSR No. 5908

EXHIBIT I

Page 1

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

--oOo--

F'REAL FOODS, LLC; and
RICH PRODUCTS CORPORATION,

Plaintiffs,

vs.

C.A. No. 16-41-GMS

HAMILTON BEACH BRANDS, INC.;
HERSHEY CREAMERY COMPANY;
PAUL MILLS d/b/a MILLS BROTHERS
MARKETS,

Defendants.

-----/

HIGHLY CONFIDENTIAL

DEPOSITION OF JAMES FARRELL
FRIDAY, APRIL 13, 2018

Reported by:
Anrae Wimberley
CSR No. 7778
Job No. 2859156

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

--oOo--

F'REAL FOODS, LLC; and
RICH PRODUCTS CORPORATION,

Plaintiffs,

vs.

C.A. No. 16-41-GMS

HAMILTON BEACH BRANDS, INC.;
HERSHEY CREAMERY COMPANY;
PAUL MILLS d/b/a MILLS BROTHERS
MARKETS,

Defendants.

-----/

HIGHLY CONFIDENTIAL

Transcript of video-recorded deposition
of JAMES FARRELL, taken at Sideman & Bancroft LLP,
One Embarcadero Center, 22nd Floor, San Francisco,
California 94111, beginning at 9:41 a.m. and ending
at 4:30 p.m. on Friday, April 13, 2018, before Anrae
Wimberley, Certified Shorthand Reporter No. 7778.

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10 Also Present:

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16 --oOo--
17
18
19
20
21
22
23
24
25

1 A. Okay.

2 Q. Do you recognize the picture on
3 FREAL_235605?

4 A. I mean, I kind of know what it is. I
5 don't remember this exact picture.

6 Q. What is shown in the picture on this page
7 of Farrell Exhibit No. 10?

8 A. So this would be kind of an early stage
9 kind of cobbled together -- it wasn't an FRLB2 yet,
10 but it was kind of the starting of putting one
11 together. There's parts of this that are actually I
12 think from an FRLB1. We just sort of cut off a
13 piece of it and repurposed it, so it's kind of a
14 really early prototype.

15 Q. What are the two plastic tubes illustrated
16 in the photo at the front of the picture? You see
17 on either side of the cup holder and the cup?

18 A. I don't really know. Not sure.

19 Q. Do you know the time frame when this
20 picture was taken in FREAL_235605?

21 A. No, I really don't know. I can't say.

22 Q. Let's go to the next page, 235606.

23 A. Yep.

24 Q. What's QT-2002?

25 A. "QT" stands for QuikTrip, which is a

1 convenience store chain. I assume 2002 is whoever
2 made the presentation's best guess at when that
3 picture was taken.

4 Q. Did you have a hand in making these
5 cardboard box displays?

6 A. Only in that I suggested the idea. I
7 mean, that was my idea of -- this was a way to -- so
8 QT, as referred here, was considering putting our
9 blenders into their stores. And they wanted to have
10 a prototype to put into a store mock-up.

11 And so everybody that was hoping to sell
12 equipment to them, which many people do, had
13 provided equipment to put into this store lineup.
14 And we actually didn't have any equipment to provide
15 because we weren't done with our design yet.

16 So all we could do -- first I was stumped
17 by this might be a problem because I really want to
18 see everything in this lineup. But I realized, oh,
19 wait, we can print out a life-sized picture, sort of
20 an image of the blender and just stick it on a
21 cardboard box. That was sort of an embarrassing
22 proposal, but at the same time, they said, well,
23 that would work. And I was like, cool. So that's
24 what we did.

25 Q. So the picture on the right on 235606, is

1 that the cardboard boxes and a store markup?

2 A. Yes.

3 Q. Sorry.

4 Store mock-up.

5 A. Mock-up, yes.

6 Q. Where was -- what city and state or
7 country -- where was that picture taken, if you
8 know?

9 A. That's -- that would be somewhere in
10 Tulsa, Oklahoma.

11 Q. Again, based on the slide, you believe the
12 picture was taken in 2002?

13 A. Yeah, I don't know better than that. I
14 can't say that it's a different year.

15 Q. So when did you first talk to QuikTrip
16 about selling them the -- I guess FRLB2 blender?

17 MR. CHAMBERS: Okay. Objection; vague,
18 ambiguous as to "selling them."

19 THE WITNESS: When did we first talk to them
20 about selling them a blender?

21 So QuikTrip -- QuikTrip knew about the
22 FRLB1, but they didn't really know about the FRLB2,
23 the details of it. But for some reason or other,
24 they were doing this -- this is what led up to these
25 cardboard boxes. But they were doing this redesign

1 of their store where they were going to re-lay out
2 the whole thing.

3 And so they approached us -- we
4 actually -- when they called us in, we thought they
5 were -- we didn't know kind of why they were calling
6 us in. But it turned out that they had, much faster
7 than you'd expect, proposed to put us into their
8 stores if we could do some things.

9 So the first we heard of them willing to
10 put blenders in their stores was -- I don't know the
11 exact dates, but it was not really that far before
12 we actually put them in. I don't know the date. I
13 do remember the meeting.

14 BY MR. FOSTER:

15 Q. You testified that they proposed putting
16 f'real into their stores if, quote, we could do some
17 things, end quote.

18 What are these "things" you could do?

19 A. Basically that was the whole notion of
20 that they would have to be self-serve. That was the
21 most important criteria to them. And then they had
22 to work operationally, which we weren't even sure
23 exactly what that meant to them. All we knew is
24 that it had better be easy.

25 Q. What would self-serve -- strike that.

1 What does self-serve mean to you?

2 A. Same thing as I said earlier, that a
3 consumer can walk into their store knowing nothing
4 about us and walk up to it and figure it out and use
5 it themselves with nobody helping.

6 Q. So would a self-serve blender have to have
7 automatic cleaning then?

8 MR. CHAMBERS: Objection; vague, ambiguous.

9 THE WITNESS: The -- I mean, you could go
10 either way on that one. Is it required? Maybe not.
11 But it ought to because when a consumer is going to
12 use this and you're not going to be anywhere in the
13 area and then another consumer is going to walk up
14 and use it after them, you want to be sure you don't
15 have any unhealthy things going on. So that's a bit
16 of a gray area.

17 But a good operator will be interested in
18 having it protect their consumers one from another.
19 Because it's pretty amazing what people will do in a
20 store if you don't pay attention.

21 BY MR. FOSTER:

22 Q. Was developing a self-serve blender a goal
23 for f'real prior to the QuikTime meeting?

24 A. QuikTrip?

25 MR. CHAMBERS: Let me get that question read

1 back.

2 MR. FOSTER: Let me strike the question because
3 I said, "QuikTime" instead of "QuikTrip."

4 BY MR. FOSTER:

5 Q. So was developing a self-serve blender a
6 goal of f'real prior to the QuikTrip meeting?

7 MR. CHAMBERS: Objection; vague, ambiguous as
8 to "meeting."

9 THE WITNESS: Yes.

10 BY MR. FOSTER:

11 Q. The meeting that you testified that you
12 had with QuikTrip, you said you didn't know when it
13 occurred, but --

14 A. Oh, no. So sorry. Ask the question now
15 that I know what you're meaning.

16 Q. Okay. Was developing a self-serve blender
17 a goal for f'real prior to the QuikTrip meeting?

18 A. Before that meeting, yeah, definitely.

19 Q. I know you don't know exactly when that
20 meeting was.

21 Was it before November 1, 2002?

22 MR. CHAMBERS: Objection; may call for
23 speculation.

24 THE WITNESS: I don't remember which dates it
25 was.

1 FEDERAL CERTIFICATE OF DEPOSITION OFFICER
2 I, ANRAE WIMBERLEY, CSR NO. 7778, do hereby
3 declare:

4 That, prior to being examined, the witness
5 named in the foregoing deposition was by me duly
6 sworn pursuant to Section 30(f)(1) of the Federal
7 Rules of Civil Procedure and the deposition is a
8 true record of the testimony given by the witness;

9 That said deposition was taken down by me in
10 shorthand at the time and place therein named and
11 thereafter reduced to text under my direction;

12 ----- That the witness was requested to
13 review the transcript and make any changes to the
14 transcript as a result of that review pursuant to
15 Section 30(e) of the Federal Rules of Civil
16 Procedure;

17 ----- No changes have been provided by the
18 witness during the period allowed;

19 ----- The changes made by the witness are
20 appended to the transcript;

21 --X-- No request was made that the
22 transcript be reviewed pursuant to Section 30(e) of
23 the Federal Rules of Civil Procedure.

24 I further declare that I have no interest in
25 the event of the action.

I declare under penalty of perjury under the
laws of the United States of America that the
foregoing is true and correct.

WITNESS my hand this 26th day of April, 2018.



ANRAE WIMBERLEY, CSR NO. 7778

EXHIBIT J

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH
PRODUCTS CORPORATION,

Plaintiffs,

V.

C.A. No. 16-41-GMS

HAMILTON BEACH BRANDS, INC.,
HERSHEY CREAMERY COMPANY and
PAUL MILLS d/b/a MILLS BROTHERS
MARKETS,

Defendants.

**DEFENDANT HAMILTON BEACH BRANDS, INC.'S
NOTICE OF RULE 30(b)(6) DEPOSITION OF PLAINTIFF F'REAL FOODS, LLC**

PLEASE TAKE NOTICE that, pursuant to Federal Rule of Civil Procedure 30(b)(6), Defendant Hamilton Beach Brands, Inc. (“Hamilton Beach”), by and through its counsel, will take the deposition upon oral examination of Plaintiff Freal Foods, LLC (“Freal”) in connection with the above-captioned proceeding.

The deposition will commence at 9:30 a.m. local time on March 8, 2018, or at a time mutually agreed upon by the parties, and will continue from day-to-day until completed, rescheduled or adjourned. The deposition will take place at the offices of Drinker Biddle & Reath LLP, 222 Delaware Ave., Suite 1410, Wilmington, DE 19801-1621, or at a place mutually agreed upon by the parties. The deposition shall be by oral examination before a notary public or court reporter, and recorded by stenographic means and videotaped. A person authorized to administer oaths shall swear in the witness, unless otherwise agreed upon by the parties.

Pursuant to Rule 30(b)(6), f̄real is directed to designate one or more officers, directors, employees, or other persons to testify on its behalf regarding the topics identified below. Hamilton Beach requests that f̄real identify the person(s) who will testify on its behalf and the topic(s) for which each person is designated no later than ten (10) days prior to the deposition.

Pursuant to Federal Rules of Civil Procedure 30(b)(2) and 34, f̄real is directed to produce all documents relevant to the topics identified below at or before the deposition.

DEFINITIONS

The following definitions shall apply to the topics for examination, regardless of whether upper or lower case letters are used:

A. “f̄real,” “Plaintiff,” “You,” and “Your” shall each mean and refer to f̄real Foods, LLC, as well as current or former successor, predecessor, and related entities of f̄real Foods, LLC, including, but not limited to, any subsidiaries, parent companies, and divisions, as well as any present or former officers, directors, employees, agents, representatives, attorneys, consultants, and anyone acting or who has acted on behalf of any of the foregoing, including all persons acting under or pursuant to any contract or agreement with any of the foregoing.

B. “Hamilton Beach” shall mean and refer to Hamilton Beach Brands, Inc., as well as all of its predecessors, predecessors-in-interest, subsidiaries, and parents.

C. “Kablooe” shall mean and refer to “Kablooe Design,” as well as current or former owners, officers, directors, employees, agents, representatives, contractors, and all persons acting or who have acted on behalf of Kablooe or any of the foregoing entities, regardless of whether such persons were acting under or pursuant to any contract or agreement with Kablooe or any of the foregoing.

D. “Third Parties” or “Third Party” shall mean any person, entity, business, or organization that is not a named party to this lawsuit.

E. “f̄real Covered Product” shall mean any product that f̄real contends practices any claim of any of the Patents-in-Suit, including f̄real’s products known by and identified as FRLB2, FRLB2-S, and FRLB4 in f̄real’s response to Hamilton Beach’s Interrogatory No. 1.

F. “f̄real Product Design” shall mean any design related to any aspect of f̄real’s Covered Products, regardless of whether any such design was implemented by or on the f̄real Covered Product.

G. “Patents-in-Suit” shall mean U.S. Patent No. 5,803,377 (“the ’377 Patent”), U.S. Patent No. 7,144,150 (“the ’150 Patent”), U.S. Patent No. 7,520,658 (“the ’658 Patent”), and U.S. Patent No. 7,520,662 (“the ’662 Patent”).

H. “The ’150 Family” shall mean the ’150 Patent, the ’658 Patent, and the ’662 Patent, collectively.

I. “Related Patents” and “Related Applications” shall mean any patent or patent application that claims priority from the Patents-in-Suit and any patent application from which a claim of priority has been made in the Patents-in-Suit, including any divisional, continuation, continuation-in-part application, any reissue, reexamination or extension thereof, any foreign counter part application, and any patent issuing from any of the foregoing.

J. “Prior Art” shall have the same definition as it is generally understood in proceedings before the U.S. Patent and Trademark Office (“USPTO”) and in 35 U.S.C. §§ 102 and 103, including, but not limited to, all documents, publications, notes and slides from oral presentations, meeting abstracts, posters, patents, physical specimens, uses, sales, offers for sale,

or other activities relating to the subject matter of any Patent-in-Suit and existing or occurring at a date such to be potentially relevant under any subsection of 35 U.S.C. §§ 102 or 103.

K. “Accused Product(s)” shall have the same definition used in f’real’s First Set of Interrogatories and First Requests for Production of Documents to Hamilton Beach.

L. “Person(s)” shall mean individuals and entities, including but not limited to all natural persons, business, firms, partnerships, associations, organizations, governmental units, joint ventures, corporations, and any other entities; and the acts of a “Person” shall include the acts of directors, officers, owners, members, employees, agents, attorneys, and other representatives acting on behalf of the “Person.”

M. “Document” means the original and each non-identical copy of information recorded upon any tangible thing regardless of the manner in which the record is stored, including but not limited to any written, printed, typed, recorded, photographed, photocopied, computerized, electronic, taped, graphic, or other matter, in whatever form, whether in final or draft, and including but not limited to all materials that constitute “writings” or “recordings” with the meaning of Federal Rule of Evidence 1001 and all materials that constitute “Documents” within the meaning of Federal Rule of Civil Procedure 34, including electronically stored information, such as electronic mail (“e-mail”), electronic data stored on computer drives, tapes, CDs, or other computer media, as well as any other information stored magnetically, electronically, or optically.

N. “Thing” shall be construed under the broadest possible construction under the Federal Rules of Civil Procedure.

O. “Communication” shall mean and refer to any transmission of information, in any form, via any medium, including but not limited to, documents incorporating, summarizing, or describing the contents of the transmission, meetings and discussions, telephone conversations,

electronic communications, telegraphic communications, or any document containing a recording, transcription, summary, or description or identifying the time, place, subject matter, medium of transmission, and/or participants in the transmission.

P. “Relate to,” “Related to,” or “Relating to” shall mean in whole or in part affecting, concerning, constituting, containing, embodying, reflecting, involving, describing, analyzing, identifying, mentioning, stating, referring directly or indirectly to, dealing with, or in any way pertaining to that subject.

Q. “Concerning” shall mean in whole or in party referring or related to, affecting, constituting, containing, embodying, reflecting, involving, describing, analyzing, identifying, mentioning, stating, referring direct or indirectly to, dealing with, or in any way pertaining to that subject.

R. “And” or “Or” are terms of inclusion and not exclusion, and shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the following Topics any information that might otherwise be construed to be outside their scope.

TOPICS FOR EXAMINATION

1. The formation of f̄real, its past and present corporate organizational structure, the responsibilities of f̄real employees, the relationship between f̄real and its parent company, Rich Products Corporation, including without limitation, the factual basis for f̄real stating that “Rich acquired f̄real in December, 2012” and “f̄real is currently a wholly owned subsidiary of Rich,” in response to Hershey’s Interrogatory No. 18.

2. f̄real’s financial information pertaining to the f̄real Covered Products for each of the past six years, Including but not limited to: (a) net sales from cups; (b) net sales from

equipment; (c) gross profit margin/profit contribution based on cup sales; (d) gross profit margin/profit contribution based on equipment sales; and (e) f̄real's expenses.

3. All marketing and sales efforts directed to f̄real's ten largest customers as of the date of this notice including but not limited to: (a) number of sales and amount of revenue attributed to each customer for every year since 2008; and (b) the factual basis for the statements in ¶ 9 of the Complaint and in response to Hamilton Beach's Interrogatory Nos. 6 and 7 that "f̄real produces milkshakes, smoothies and frozen cappuccino beverage product that are sold at over 13,000 locations across the United States and Canada."

4. All f̄real business plans established, prepared, derived, or that otherwise came into existence in the six year period before the Complaint was filed, including without limitation strategic plans, growth prospects, sales strategies, sales forecasts, consumer research, financial projections, and market share analysis.

5. All offers, discussions, and agreements regarding f̄real's transfer of any ownership interest in f̄real and/or assets (*e.g.*, the Patents-in-Suit) to a third party, regardless of the actual or proposed structure of the transaction, including without limitation Rich Products Corporation's acquisition of f̄real and its assets.

6. All valuations of f̄real's intellectual property and goodwill or other tangible assets associated with f̄real's intellectual property, including without limitation valuations of the Patents-in-Suit and any mark asserted by f̄real in this litigation, and all correspondence and discussions with any and all third parties regarding valuation of f̄real's intellectual property.

7. All of f̄real's intellectual property policies, guidelines, practices, and procedures from 2011 through the present including without limitation those pertaining to filing of new patent applications and decisions to enforce f̄real's patents.

8. All of f'real's policies, guidelines, practices, and procedures for generating, maintaining, retaining, and disposing of documents and things from 2011 through the present, including retention and retrieval of e-mail and all other electronically stored information.

9. The efforts taken by f'real to preserve, search, collect, and produce relevant documents in response to Hamilton Beach's Requests for Production, including without limitation the potential locations and custodians of such documents (including electronically stored information), and the identity of all Persons who took part in preserving, searching, collecting, and producing such documents.

10. All facts and circumstances concerning f'real's acquisition of the Patents-in-Suit and its purported right to assert the Patents-in-Suit in this case, including without limitation: (a) the terms of all agreements or contracts under which f'real acquired the Patents-in-Suit and the consideration given under such agreements or contracts; and (b) the identity of all Persons who have held or currently hold any right or interest in the Patents-in-Suit or any proceeds from the enforcement of the Patents-in-Suit, whether by ownership, assignment, license, agreement, or otherwise, and for each person identified, the specific rights and/or interests.

11. The factual basis for the '150 Patent Family claiming the benefit of priority to U.S. Provisional Patent Application No. 60/426,622.

12. All facts and circumstances concerning the alleged invention of any subject matter covered by each of the asserted claims of the Patents-in-Suit, including without limitation: (a) the date of any alleged conception and reduction to practice, and any corroborating evidence of the date and circumstances; (b) the identity and contributions of all Persons involved with any alleged conception and reduction to practice; (c) the pertinent field of art and the level of ordinary skill in the field at the time of the alleged inventions; (d) commercial mixer/blender technology generally;

and (e) the content of all documents cited by f̄real in its responses to Hamilton Beach's Interrogatory No. 3 as purportedly having "information pertaining to f̄real's pre-filing conception and/or reduction to practice efforts."

13. The preparation and prosecution of the patent applications leading to the Patents-in-Suit, including without limitation: (a) the identity of all Persons involved and the nature of their involvement; (b) the decision to file the patent applications and/or continue prosecution for each of the Patents-in-Suit; and (c) all assignments or conveyances of rights in, under, or to the patent applications leading to the Patents-in-Suit.

14. The general subject matter of all prior art references: (a) disclosed to the USPTO during prosecution of the Patents-in-Suit, regardless of whether the USPTO considered or cited any such references; and (b) reviewed or considered by f̄real after the Patents-in-Suit were granted, including without limitation prior art reviewed or considered in connection with: (i) the patent licensing agreement with Hamilton Beach; (ii) the corporate transaction by which Rich Products Corporation obtained ownership of f̄real and its assets; and (iii) this lawsuit.

15. All facts and circumstances pertaining to the first instance in which a product having any element or implementing any step of any claim in the '150 Family was disclosed or offered for sale to a third party outside of f̄real, including without limitation the first instance in which the product was disclosed to a third party through a video, animation, presentation, drawing, brochure, or any type of Document or Thing.

16. All facts and circumstances related to f̄real's efforts to commercialize its then-new blender design at the National Association of Convenience Stores ("NACS") trade show in Orlando, Florida over the weekend of October 3-6, 2002, including without limitation: (a) the identify of all third parties at the NACS trade show that saw the video of f̄real's then-new blender

design; and (b) the identity of all third parties at the NACS trade show to whom f̄real offered to sell its then-new blender design.

17. The factual basis for any purported commercial success of f̄real Covered Products, and the relationship between any such purported commercial success and the subject matter corresponding to each of the asserted claims of the Patents-in-Suit, including without limitation “[t]he rapid growth of F’REAL’s self-serve milkshake and smoothie sales during the past 15 years” identified in f̄real’s response to Hershey’s Interrogatory No. 7.

18. All f̄real Product Designs involving Kablooe, including without limitation Kablooe’s contributions to the aesthetic features, user interaction process, operation, and mechanical elements of the “f̄real Milkshake Mixer” described in F’REAL_000538-76, the “Concept Designs” shown in F’REAL_000650-662, the CAD models, drawings, and other engineering or design documents pertaining to the f̄real blender shown in the video produced as KABLOOE_026662, and the “F’Real Shake Mixer” drawings shown in F’REAL_000598-729.

19. The business relationship between f̄real and Kablooe, including with limitation the scope of the relationship (*e.g.*, the “research, ideation, design, prototypes, engineering, project management, [and] modifications” described by the Kablooe invoice at KABLOOE_000158), any agreements proposed and/or entered into by f̄real and Kablooe (*e.g.*, the “Design Royalty Agreement” at KABLOOE_026655), and all of Kablooe’s activities related to f̄real Product Designs (*e.g.*, the various “Activit[ies]” relating to the “f̄real prototype” shown in KABLOOE_026655).

20. The facts and circumstances pertaining to f̄real’s hire of Andrew Geppert and this general job responsibilities, in the past or present, as an employee of f̄real, including without

limitation the nature and scope of Mr. Geppert's involvement in drafting and prosecution of the Patents-in-Suit.

21. The features and operation of f'real Covered Products, including without limitation: (a) the factual basis for asserting that they practice at least one claim of the Patents-in-Suit; (b) the existence location of the rinse chamber in each f'real Covered Product; (c) the existence and location of a splash shield of sufficient mass in each f'real Covered Product; (d) the existence and location of a splash shield that is unrestrained from vertical movement on each f'real Covered Product; and (e) when each f'real Covered Product directs rinsing fluid onto a splash shield while isolating rinsing fluid from f'real "milkshake" made by the f'real Covered Product.

22. The factual basis for the statements made in ¶¶ 16-18 of f'real's Complaint respectively, that "f'real owns the '150 patent and has the right to sue for infringement," "f'real owns the '658 patent and has the right to sue for infringement," and "f'real owns the '662 patent and has the right to sue for infringement."

23. The factual basis for the statements in ¶ 19 of f'real's Complaint that "Hamilton Beach indicated to f'real that it was interested in supplying milkshake blending equipment to fast food restaurants, full service restaurants and ice cream stores," and "[t]o avoid violating f'real's patent rights, Hamilton Beach sought and obtained a license from f'real under f'real's '150, '658 and '662 patents."

24. The factual basis for the statements in ¶¶ 36, 43, 50, and 57 of f'real's Complaint that Hamilton Beach "know[s] that [its] unlicensed blending machines" infringe the Patents-in-Suit, including all investigations, tests, simulations, comparisons, analyses, and opinions prepared and/or performed by f'real or on f'real's behalf relating to the operation of the Accused Products,

such as the “experiments” described by f̄real in response to Hamilton Beach’s Interrogatory No. 10.

25. The facts and circumstances relating to each instance where f̄real or someone acting on its behalf purportedly witnessed a single individual perform every step of an asserted method claim of the Patents-in-Suit, including without limitation the facts and circumstances surrounding the purported events of September 25, 2014 described in f̄real’s response to Hamilton Beach’s Interrogatory No. 8.

26. The factual basis for Hamilton Beach’s purported act(s) of direct infringement of the Patents-in-Suit, including without limitation the identity of the supposed direct infringer(s) and the specific act(s) or product(s) of Hamilton Beach’s involved in the supposed act(s) of direct infringement or that actively induced the infringing conduct.

27. The factual basis for calculating the actual damages that f̄real claims to have sustained as a result of Hamilton Beach’s purported infringement.

28. The factual basis for the statements in f̄real’s response to Hamilton Beach’s Interrogatory Nos. 6 and 7 that “Defendants are taking away customers who have otherwise gone to f̄real for self-serve milkshakes and smoothies” and the identity of such customers.

29. The factual basis for the statements in ¶¶ 37, 44, 51, and 58 of f̄real’s Complaint that unless enjoined from selling the Accused Product, Hamilton Beach will “cause irreparable injury to f̄real and Rich.”

30. All efforts by f̄real to license, sell, and/or enforce any of the Patents-in-Suit, including without limitation: (a) agreements, offers, and negotiations between f̄real and every third party pertaining to any rights to practice f̄real’s patents, such as licenses, sublicenses, cross-licenses, settlement agreements, royalty agreements, indemnity agreements, covenants not to sue;

and (b) all communications with third parties regarding the alleged infringement of any of f̄real's patents or the possibility of entering into a licensing or settlement agreement pertaining to or covering any of f̄real's patents.

31. All efforts, whether by f̄real or another party on f̄real's behalf, to license from any other entity any intellectual property that f̄real has obtained or has contemplated obtaining.

32. All efforts by, or conducted on behalf of, f̄real to evaluate whether the Accused Products practice each and every element of the asserted claims, including without the limitation: (a) the identity of all persons involved in such investigations and evaluations; (b) the location, date, and time at which these investigations and evaluations took place; (c) the result of these investigations and evaluations; and (d) discussions of the results between f̄real and any third party.

33. All consideration, monetary or otherwise, received or paid by f̄real in connection with an agreement involving any of the Patents-in-Suit or any f̄real Covered Product.

34. The factual basis for the statement in ¶¶ 56 and 59 of f̄real's Complaint in 14-1270-GMS that Hamilton Beach uses the words "REAL ICE CREAM," "REAL MILKSHAKES," and "REAL FAST" on the Accused Products, and that the use of these words "is likely to cause confusion or mistake or is likely to deceive consumers," including without limitation the package of the Accused Product and marketing documents, advertising, or promotional material for the Accused Product.

35. The factual basis for asserting the dismissed Count VIII of f̄real's Complaint in 14-1270-GMS for unfair competition, including the statement in ¶ 27 that "Hamilton Beach and Hershey Creamery have . . . sold their products in retailer kiosks that closely mimic those developed by f̄real," and the statement in ¶ 28 that "like f̄real, the competing Hamilton Beach

and Hershey Creamery kiosks have a blender with advertising signage sitting atop a merchandizing freezer with a see-through glass door.”

36. f̄real’s decision to file the Complaint in C.A. 14-1270-GMS or the Complaint in C.A. No. 16-41-GMS, including without limitation: (a) the steps that were taken at f̄real in deciding to file and maintain that litigation; (b) all Persons who were responsible for, involved in, or contributed to f̄real’s decision to file and maintain that litigation; and (c) each Person’s duties, responsibilities, and contributions pertaining to f̄real’s decision to file and maintain that litigation.

37. f̄real’s decision not to file a lawsuit against Manitowoc alleging infringement of any of the Patents-in-Suit, including without limitation (a) the steps that were taken at f̄real in deciding not to file litigation against Manitowoc; (b) all Persons who were responsible for, involved in, or contributed to f̄real’s decision not to file litigation against Manitowoc; (c) each Person’s duties, responsibilities, and contributions pertaining to f̄real’s decision not to file litigation against Manitowoc; and (d) all documents, that discuss, describe, reference, or relate to f̄real’s decision not to file litigation against Manitowoc.

38. The relevant market or market demand for f̄real’s Covered Products and the Accused Products, including but not limited to the products You contend compete, have competed, or may compete with those products.

39. The purchasing preferences of customers to whom You sell and market Your Covered Products, including but not limited to with regard to price, cost, quality, service, and technology.

40. The markets in which You sell Your Covered Products, all firms who compete with You in the sale of Covered Products, the nature and extent of Your competition with those firms, and the market share (by units sold or revenue) of each firm that sells or has sold Covered Products.

41. Your contention that none of Your or Rich's actions in filing the prior litigation or this litigation, or in failing to name all of the proper inventors lessened competition in a relevant antitrust market.

42. Your independent, legitimate business and economic justifications supporting Your contention that You did not violate the antitrust laws.

43. Any sales that f'real contends it lost based on Hamilton Beach's alleged infringement of the Patents-in-Suit, including but not limited to the identity of the specific customer(s) that f'real allegedly lost, the factual basis for contending that f'real lost each customer, and the efforts f'real made to sell its product to each customer.

44. Your responses to Defendants' interrogatories, including the content of documents cited by it in response to each of Defendants' interrogatories.

45. The custodians of each document requested in Defendants' requests for production.

46. The nature and location of, and the identity of the persons most knowledgeable about the collection of the documents produced by You in this action.

To the extent that the officers, directors, managing agents, or other persons designated by f'real are unfamiliar with any of the matters listed above, f'real is directed to make a diligent effort to educate its designated representative(s) on such matters so that they are able to adequately testify on the topics set forth above.

You are invited to attend and cross-examine.

Dated: January 30, 2018

/s/ Thatcher A. Rahmeier
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CERTIFICATE OF SERVICE

I hereby certify that on January 30, 2018, copies of the foregoing were caused to be served upon the following individuals via electronic mail.

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/s/ Thatcher A. Rahmeier
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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' REPLY IN SUPPORT OF MOTION IN LIMINE NO. 3
TO EXCLUDE UNTIMELY DEFENSES**

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April 8, 2019

Defendants do not dispute in their Opposition that they failed to disclose their non-infringement contentions and “on sale” invalidity contentions in response to Plaintiffs’ interrogatories. Defendants nonetheless argue their failure should be excused because Plaintiffs could have allegedly cobbled together information about Defendants’ contentions from other sources, including “Defendants’ expert [rebuttal] report served on September 2018” (Def. Opp., p. 1) as well as Defendants’ summary judgment pleadings (*id.* at 3), and, for that reason, Plaintiffs have not been prejudiced (*id.*). That is not the way discovery works and preclusion of the undisclosed contentions is warranted. *See* Fed. R. Civ. P. 37(c)(1).

As demonstrated by Defendants’ Motions *In Limine* Nos. 2 and 3, Plaintiffs could be severely prejudiced by Defendants’ written discovery failures and stonewalling. Defendants now seek to exclude evidence that Plaintiffs had to scramble to present in response to Defendants’ rebuttal expert report and summary judgment motions, where their new defenses were first presented. If Defendants had responded properly to Plaintiffs’ contention interrogatories, Plaintiffs would have known Defendants’ contentions by the close of fact discovery and Dr. Maynes could have fully addressed those contentions in his opening expert report.

Defendants cannot have it both ways – Defendants should either be precluded from presenting defenses they failed to raise in response to Plaintiffs’ interrogatories or Plaintiffs should be allowed to rely upon rebuttal evidence presented in response to Defendants’ first disclosure of such evidence. Either way, Plaintiffs should not be punished for Defendants’ failure to abide by their discovery obligations.¹

¹ As discussed in Plaintiffs’ Statement of Additional Matters (PTO Ex. 19, No. 4), Defendants continue to inject new issues into the litigation by presenting them for the first time in the pretrial order.

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April 8, 2019

PRETRIAL ORDER EXHIBIT 16

IN THE UNITED STATES DISTRICT
COURT FOR THE DISTRICT OF
DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

DEFENDANTS' MOTION IN LIMINE NO. 1

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Dated: March 26, 2019

Counsel for Defendants

Defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively, “Defendants”) respectfully move the Court to instruct f’real Foods, LLC (“f’real”) and Rich Products Corporation (“Rich”) (collectively, “Plaintiffs”), Plaintiffs’ attorneys, witnesses, and all other persons involved in this case on Plaintiffs’ behalf, not to mention or to bring before the jury, either directly or indirectly, by any means or manner, any of the matters set forth in the paragraphs below, unless and until such matters have been first called to the Court’s attention, out of the presence and/or hearing of the jury, giving Defendants an opportunity to object and obtain a ruling prior to any mention or reference to the following:

Motion in Limine No. 1. Parties should be precluded from offering any testimony, evidence, argument or reference related to any *inter partes* reviews (“IPRs”) of the Asserted Patents—including the institution decisions for the ’150 patent, ’658 patent, and ’662 patent, and the final written decision and Federal Circuit opinion for the ’662 patent.

Pursuant to 35 U.S.C. § 314(a), the threshold for IPR is whether “there is a **reasonable likelihood** that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” (emphasis added). This standard greatly differs from a district court’s ultimate determination of invalidity, which must be proven by the accused infringer by clear and convincing evidence. 35 U.S.C. § 282(a); *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 114 (2011).

Accordingly, courts have consistently held that evidence of the PTAB denying institution of an IPR should not be presented to a jury as such evidence is irrelevant and would cause jury confusion and unfair prejudice to the accused infringer. Fed. R. Evid. 402, 403; *see, e.g., Evolved Wireless, LLC v. Apple Inc.*, No. CV 15-542-JFB-SRF, 2019 WL 1100471, at *3 (D. Del. Mar. 7, 2019); *ART+COM Innovationpool GmbH v. Google Inc.*, No. CV 1:14-217-TBD, 2016 WL 11531119, at *2 (D. Del. May 16, 2016); *Wisconsin Alumni Research Found. v. Apple, Inc.*, 135 F. Supp. 3d 865, 874–75 (W.D. Wis. 2015) (“The IPR proceeding is subject to different standards, purposes and outcomes than both the original prosecution and this court proceeding. . . . Although the court could attempt to provide instructions . . . it would be difficult for a jury to understand, much less apply, the nuanced

differences between the various proceedings and to determine how much weight should be given to [the] PTAB's [institution] decision, if any. Instead, there is a great risk that the jury would conclude, incorrectly, that the Patent Office has twice held the '752 patent is nonobvious over prior art. Such a conclusion would likely unfairly prejudice the jury against Apple before being asked to decide the same question.”).

Courts have consistently held the same even when the PTAB grants institution on the asserted grounds. *See, e.g., Hologic, Inc. v. Minerva Surgical, Inc.*, No. 1:15-CV-1031, 2018 WL 3348998, at *4 (D. Del. July 9, 2018); *Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, No. 4-CV-1296-JPS, 2017 WL 4570787, at *5-6 (E.D. Wis. Oct. 12, 2017) (holding that “admitting evidence of the IPRs is likely to mislead the jury into believing that because the patents-in-suit have survived many attacks, they must be valid against the present attacks.”); *Personalized Media Commc'ns, LLC v. Zynga, Inc.*, No. 2:12-CV-00068-JRG, 2013 WL 10253110, at *1 (E.D. Tex. Oct. 30, 2013); *Ivera Med. Corp. v. Hospira, Inc.*, No. 14-CV-1345-H-RBB, 2015 WL 11529819, at *1 (S.D. Cal. July 21, 2015). Here, the instituted IPR of the '662 patent is particularly irrelevant as Defendants are now estopped from raising the invalidity grounds asserted in that petition.

Defendants submitted the IPR petitions challenging the Asserted Claims of the '150 Patent, '658 Patent, and '662 Patent. The PTAB granted institution for one *inter partes* review of the '662 Patent but denied institution for the others.

Consequently, the parties would need to explain to the jury the differences in the standards for institution and its implications as well as the purpose and procedural variations as compared to district court proceedings. As many other Courts have recognized, this type of explanation would inevitably result in jury confusion and wasted time, and would cause unfair prejudice to Defendants.

Moreover, the expert testimony of record in the IPR proceedings, in the form of declarations or cross-examination, would similarly be confusing and misleading to the jury, as the petitions for *inter partes* reviews were not governed by the Court's claim construction, were made under a different standard or review, thus do not meet the relevance standards of FRE 401 and 403 and constitute inadmissible hearsay. The *inter partes* reviews have already received proper consideration in the case as they were part of the Court's construction determinations, and any relevant factual evidence from the IPRs is already of record in the district court action. Exposing the jury to IPR proceedings and related expert testimony would merely further complicate issues before the jury. Accordingly, the Court should preclude the parties from offering any testimony, evidence, argument or reference related to any of the *inter partes* reviews of the Asserted Patents.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' OPPOSITION TO DEFENDANTS'
MOTION IN LIMINE NO. 1 TO PRECLUDE IPR EVIDENCE**

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Attorneys for Plaintiff

April 2, 2019

Plaintiffs oppose Defendants' blanket request to preclude "any testimony, evidence, argument or reference related to" Defendants' four unsuccessful *inter partes* review ("IPR") proceedings, particularly to the extent it prevents legitimate cross-examination of Defendants' technical expert about factual inaccuracies, misleading arguments, and inconsistent positions he took during the proceedings.¹ Plaintiffs recognize that courts often preclude *improper* use of IPR proceedings at trial, but there are circumstances where such evidence is appropriate.

As a matter of law, f'real's four patents-in-suit are presumed to be valid and Defendants have the burden of proving invalidity at trial by clear and convincing evidence.² 35 U.S.C. § 282; *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 102 (2011). "This burden is less easily carried when the evidence relied upon consists only of the prior art considered by the examiner." *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1359 (Fed. Cir. 1983).³

Prior Art Considered by the PTO. During the parties' meet and confer on this motion, Defendants not only refused to stipulate that the PTO considered their IPR prior art references (e.g., Kelly, Miller, Sato, Karkos etc.), but Defendants also indicated they plan to (incorrectly) contend at trial that those references are new prior art never considered by the Patent Office.

¹ For example, Dr. Slocum considered the claim term "sufficient mass" perfectly definite and understandable in two IPR declarations but now flip-flops and opines that the claim term is fatally indefinite (D.I. 177, Ex. 7, pp. 10-12). Also, as the PTAB found in its final '662 IPR Decision, Dr. Slocum mischaracterizes the Miller reference. *See Hamilton Beach Brands, Inc. v. f'real Foods, LLC*, 2017 WL 6513981, *7 (P.T.A.B. Dec. 19, 2017).

² To the extent Defendants imply that the standard for institution of an IPR ("reasonable likelihood that the petitioner would prevail") is higher than the standard for proving invalidity at trial, they are incorrect. At the PTAB, the invalidity standard is a "preponderance of the evidence," which is subsumed in the "reasonable likelihood" inquiry, and thus a lower standard than "clear and convincing evidence." *See Glob. Tel*link Corp. v. Securus Techs., Inc.*, 2014 WL 6985726, *19 n.7 (P.T.A.B. Dec. 8, 2014) (comparing 35 U.S.C. § 282(a) with § 316(e)).

³ It is well established that the presumption of validity is more difficult to overcome when the patent challenger is relying upon prior art already considered by the Patent Office. *E.g., Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 447 (Fed. Cir. 1986); *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990); *i4i*, 564 U.S. at 113 ("For nearly 30 years, the Federal Circuit has interpreted § 282 as we do today.").

Where, as here, there is a dispute about whether the Patent Office has considered certain prior art references, the Supreme Court indicated in *i4i*, 564 U.S. at 111, that the jury should resolve the question:

When it is disputed whether the evidence presented to the jury differs from that evaluated by the PTO, the jury may be instructed to consider that question. . . . [T]he jury may be instructed to evaluate whether the evidence before it is materially new, and if so, to consider that fact when determining whether an invalidity defense has been proven by clear and convincing evidence.

See also Andover Healthcare, Inc. v. 3M Co., C.A. No. 13-843-LPS, 2016 WL 6404111, *2 (D. Del. Oct. 27, 2016) (IPRs may be used if defendant argues the prior art was not considered by the PTO). To assist the jury in evaluating whether the prior art presented by Defendants is “materially new,” the jury should have the benefit of not only the original prosecution histories but also, to the extent proceedings have been completed, the PTAB’s carefully reasoned IPR decisions. *See Universal Elecs., Inc. v. Universal Remote Control, Inc.*, 2014 WL 8096334, *7 (C.D. Cal. April 21, 2014); *StoneEagle Svcs., Inc. v. Pay-Plus Solutions, Inc.*, 2015 WL 3824208, *8-9 (M.D. Fla. June 19, 2015).

’662 IPR and Appeal. Defendants’ position is particularly egregious for the ‘662 IPR where Defendants’ asserted references were not only fully adjudicated through a PTAB trial and final decision but also through a precedential Federal Circuit appellate decision. Contrary to the statutory IPR purpose of providing a *binding alternative* to district court adjudication, Defendants and Dr. Slocum intend to argue to the jury that a *weaker* version (e.g., Neilson, Miller, Sato) of the references finally and fully adjudicated against them (e.g., Neilson, Miller, Kelly) is really a new, more relevant combination. *See* D.I. 173 at 1-2. By using their *in limine* motion to hide from the jury the final adverse IPR adjudications, Defendants seek to block Plaintiffs from exposing on cross-examination the fallacy of their arguments.

Use for Cross-examination. Defendants’ motion to preclude “any testimony, evidence, argument or reference” to any of the IPRs goes too far. Even where courts have generally precluded use of IPRs at trial, they have allowed use of IPR testimony and evidence on cross-examination. *See, e.g., Siemens Mobility Inc. v. Westinghouse Air Brake Techs. Corp.*, 2019 WL 77046, *1 (D. Del. Jan. 2, 2019). In *Siemens*, Judge Stark allowed the parties to use evidence that was developed in an IPR or other litigation so long as its origin was identified simply as from “another matter.” *Id.*; *see Alarm.com, Inc. v. SecureNet Techs. LLC*, C.A. No. 15-87-RGA, D.I. 242 at 3 (D. Del. Jan. 23, 2019) (allowing use of IPRs “to the extent that a witness’s prior sworn statements in [the IPR] actions may be used for purposes of impeachment.”); *Nox Medical ehf v. Natus Neurology Inc.*, C.A. No. 15-709-RGA, 2018 WL 6629704, *1 (D. Del. Apr. 12, 2018) (“Of course, if a witness made an inconsistent statement in connection with an IPR, the witness may be impeached with it.”); *D&M Holdings, Inc. v. Sonos, Inc.*, C.A. No. 16-141-RGA, 2018 WL 1033358, *12 (D. Del. Feb. 22, 2018) (same); *RainDance Techs., Inc. v. 10X Genomics, Inc.*, C.A. No. 15-152-RGA, 2018 WL 6629705, *1 (D. Del. Oct. 12, 2018) (same).

Courts also allow use of a non-instituted IPR if the accused infringer argues at trial that the PTO never considered the prior art. *See Andover*, 2016 WL 6404111, *2 (“The Court will reevaluate its granting of 3M’s motion [to exclude the IPR] should 3M argue or attempt to prove that the PTO has never considered the [] prior art, which 3M asserts as invalidating prior art and which was also prior art on which its (rejected) IPR petition was based.”).

Having dragged Plaintiffs and the Patent Office through the trouble, expense, and delay of *inter partes* review for all four of f’real’s patents-in-suit, including two IPR petitions for the ‘658 patent, Defendants and their technical expert, Dr. Slocum, should not complain about being confronted on cross-examination by the proceedings they set in motion.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/ Michael J. Flynn

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April 2, 2019

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY,

Defendants.

C.A. No. 16-41 (CFC)
CONSOLIDATED

**DEFENDANTS' REPLY TO PLAINTIFFS' OPPOSITION TO DEFENDANTS'
MOTION IN LIMINE NO. 1 TO PRECLUDE IPR EVIDENCE**

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Dated: April 7, 2019

Counsel for Defendants

As courts have consistently held, parties should be precluded from referencing IPRs because of the risk of jury confusion, wasted time, and unfair prejudice.¹

The cases cited by Plaintiffs only show that “the [clear-and-convincing] burden is less easily carried” when prior art was before an examiner during *prosecution* and do not address when prior art is asserted in a post-grant proceeding, such as a non-instituted IPR. For non-instituted IPRs, Plaintiffs’ argument is overly broad, because Defendants should be permitted to state that the asserted prior art was not in front of the examiner during prosecution.²

In addition, Defendants do not oppose Plaintiffs’ ability to use IPR declarations in cross-examination, to the extent admissible under the Federal Rules of Evidence (and consistent with *Siemens Mobility Inc. v. Westinghouse Air Brake Techs. Corp.*, No. 16-284-LPS, 2019 WL 77046, at *1 (D. Del. Jan. 2, 2019), permitting reference to “another matter”). However, Dr. Slocum’s declarations in the IPRs were based on different prior art combinations, standards, and arguments. Plaintiffs mischaracterize Dr. Slocum’s analysis of the “sufficient mass” limitation in the ’658 IPRs. Parties cannot challenge definiteness in an IPR, so Dr. Slocum performed his analysis based on Plaintiffs’ proposed constructions and he never testified that “sufficient mass” was “perfectly definite and understandable.” Defendants are also estopped from asserting the ’662 IPR combination; therefore, the PTAB’s statements about Miller are not applicable here. Because of the substantial risk of prejudice, Defendants request an in-camera review to occur in advance of any such use of Dr. Slocum’s IPR declarations by Plaintiffs.

For the foregoing reasons, Defendants’ Motion should be granted.

¹ Plaintiffs fail to cite a single case to support why evidence of the ’662 IPR and Federal Circuit decision should be permitted at trial.

² Unlike *Andover*, the Federal Circuit recently stated that parties are permitted to inform the jury that the *examiner* did not consider IPR prior art references during prosecution—without opening the door to allow plaintiffs to introduce non-institution decisions. See *TEK Global, S.R.L. v. Sealant Sys. Int’l, Inc.*, No. 2017-2507, 2019 WL 1412538, at *4 n.1 (Fed. Cir. Mar. 29, 2019).

PRETRIAL ORDER EXHIBIT 17

**IN THE UNITED STATES DISTRICT
COURT FOR THE DISTRICT OF
DELAWARE**

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

DEFENDANTS' MOTION IN LIMINE NO. 2

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Dated: March 26, 2019

Counsel for Defendants

Defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively, “Defendants”) respectfully move the Court to instruct f̄real Foods, LLC (“f̄real”) and Rich Products Corporation (“Rich”) (collectively, “Plaintiffs”), Plaintiffs’ attorneys, witnesses, and all other persons involved in this case on Plaintiffs’ behalf, not to mention or to bring before the jury, either directly or indirectly, by any means or manner, any of the matters set forth in the paragraphs below, unless and until such matters have been first called to the Court’s attention, out of the presence and/or hearing of the jury, giving Defendants an opportunity to object and obtain a ruling prior to any mention or reference to the following:

Motion in Limine No. 2. Plaintiffs should be precluded from providing any testimony or arguments regarding Defendants’ alleged infringement under the doctrine of equivalents (“DOE”).

a. Preclusion Due to Dr. Maynes’ Conclusory Opinion. Dr. Maynes provided only conclusory opinions regarding the DOE, which cannot sustain a claim of infringement under the DOE. *See MKS Instruments, Inc. v. Advanced Energy Indus., Inc.*, 325 F. Supp. 2d 471, 473-74 (D. Del. 2004) (“Conclusory statements are not enough to sustain a claim of equivalence.”). At the end of each section of his report, Dr. Maynes merely states that “each element of each step performed by them and their consumers has substantially the same function, is performed in substantially the same way and achieves substantially the same result as the literal elements of the claim.” Ex. A at 52, 62-63, 67, 80-81. Dr. Maynes never identifies any specific bases for asserting the DOE; he merely parrots the standard. Accordingly, Dr. Maynes and Plaintiffs should be precluded from providing any testimony or any arguments regarding Defendants’ alleged infringement under the DOE.

b. Preclusion Due to Prosecution History Estoppel. A patentee is estopped from asserted infringement under the DOE—as a matter of law—if it made narrowing amendments during prosecution related to patentability. *See Juniper Networks, Inc. v. Palo Alto Networks, Inc.*, 15 F. Supp. 3d 499, 512 (D. Del. 2014) (“a narrowing amendment made to satisfy any requirement of the Patent Act’ creates a presumption that ‘the patentee surrendered all subject matter between the

broad and the narrower language”) (citations omitted). Here, f’real made narrowing amendments during prosecution.

During prosecution of **the ’658 Patent**, narrowing amendments were made to the “unrestrained” and “sufficient mass” limitations. Defendants’ summary judgment arguments regarding the unavailability of DOE for these limitations are incorporated herein. *See* D.I. 178 at 12-14 (unrestrained) and 5 (sufficient mass); D.I. 216 at 6-7 (both). In addition, Plaintiffs are estopped under the “dedication-disclosure” doctrine from alleging that the “unrestrained” or “sufficient mass” limitations are met by the DOE. *See Johnson & Johnston Assocs. v. R.E. Serv. Co.*, 285 F.3d 1046, 1054 (Fed. Cir. 2002) (*en banc*). This is because the patentee *disclosed, but did not claim*, “us[ing] a heavy weight to hold the shield and cup in place.” *See* Ex. B. This scope cannot be recaptured via the DOE.

With respect to **the ’150 Patent**, the “rinse chamber” limitation (including a “door . . . covering the entrance”) was added to issued claim 15 as a narrowing amendment in response to a rejection from the PTO. Ex. C at 3. f’real argued that the rinse chamber was specifically added to overcome prior art. *Id.* at 3, 6-7 (“The cited references do not disclose[sic] such a feature”).

Claim 21 of **the ’662 patent** cannot be infringed under DOE because the “directing rinsing fluid . . . while isolating” limitation was added to the parent ’150 patent to overcome prior art. *Id.* at 2, 6-7. Because this narrowing limitation was added during prosecution of the parent for reasons related to patentability, Plaintiffs

cannot assert infringement of the continuation-in-part '662 patent under the DOE for that limitation. *See Mark I Mktg. Corp. v. R.R. Donnelley & Sons Co.*, 66 F.3d 285, 291-92 (estoppel extends from parent to patent from continuation application).

In **the '377 Patent**, claim 1 was amended to clarify the function of the “aeration means” and comply with § 112, ¶2 and overcome a prior art rejection. Ex. D at 2, 11-12. Likewise, claim 11 was amended to clarify the “rotatable blade assembly” to include both “shaving elements” and “aeration elements” and add upper and lower blade positions. *Id.* at 5, 12. Claim 27 was added in the same response to clarify that the “rotatable blade assembly” has “shaving elements” and “aeration elements” to perform the claimed shaving and aeration limitations. *Id.* at 10, 12. All of these amendments were added to overcome the Tomlinson prior art reference. As each of these amendments was made for a purpose relating to patentability, prosecution history estoppel applies and precludes DOE for the affected limitations of claims 1, 11, 27 of the '377 patent.

c. Preclusion Due to Vitiating. Plaintiffs are also not entitled to DOE under the doctrine of claim vitiating for the “unrestrained” limitations of the '658 patent and the “while” limitation of the '662 patent. D.I. 178 at 14 n.5. DOE cannot be used recapture products that are “restrained” and direct rinse fluid “after” isolating the vessel. *See Mirror Worlds, LLC v. Apple Inc.*, 692 F.3d 1351, 1358 (Fed. Cir. 2012) (“Reading the . . . limitation out of the claim improperly vitiates claim language by allowing the exact opposite of what is required.”).

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS
CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY

Defendants.

C.A. No. 16-41-CFC

CONSOLIDATED

**DECLARATION OF FRANCIS DIGIOVANNI IN SUPPORT OF
DEFENDANTS' MOTION *IN LIMINE* NO. 2**

I, Francis DiGiovanni, declare:

1. I am a licensed attorney with the law firm of Drinker Biddle & Reath LLP, counsel for defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively "Defendants") in the above-captioned action. I am admitted to practice in this District, I am over 18 years of age, and have personal knowledge of the matters stated in this declaration and would testify truthfully to them if called

upon to do so. I submit this declaration in support of Defendants' Motion *in Limine* No. 2.

2. Attached hereto as Exhibit A is a true and correct copy of the Opening Expert Report of Daniel Maynes, Ph.D Concerning Infringement of f'real's Patents-in-Suit, served on August 24, 2018.

3. Attached hereto as Exhibit B is a true and correct copy of U.S. Provisional Patent Application 60/426,622.

4. Attached hereto as Exhibit C is a true and correct copy of the Response to Office Action Mailed October 4, 2005 in U.S. Patent Application No. 10/715,171 that was produced in discovery bearing Bates Nos. HBBF0051106-12.

5. Attached hereto as Exhibit D is a true and correct copy of the Response to Office Action Mailed September 2, 1997 in U.S. Patent Application No. 08/794,859 that was produced in discovery bearing Bates Nos. HBBF0050535-47.

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed this 26th day of March, 2019, in Wilmington, Delaware.

/s/ Francis DiGiovanni
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DRINKER BIDDLE & REATH LLP

EXHIBIT A

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (GMS)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and	)	HIGHLY CONFIDENTIAL
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**OPENING EXPERT REPORT OF
DANIEL MAYNES, Ph.D CONCERNING
INFRINGEMENT OF F'REAL'S PATENTS-IN-SUIT**

I, Daniel Maynes, declare as follows:

1. I have been retained by the attorneys for Plaintiffs f'real Foods, LLC and Rich Products Corporation (collectively "f'real" or "Plaintiffs") to serve as an expert in the fields of mechanical engineering and fluid dynamics. Based upon my expertise and my investigation of the relevant facts, I have been asked in this report to evaluate whether the production, sales, leasing and use in commerce of the accused blenders produced by Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach") would infringe the asserted claims of f'real's patents-in-suit. For the reasons stated in this report, I conclude that they would.

I. Qualifications

2. I am Chairman of the Mechanical Engineering Department at Brigham Young University ("BYU") and have served in that position since 2013. I have also held numerous other professorial positions in the BYU Mechanical Engineering Department since 1997.

3. I received my Ph.D. in Mechanical Engineering from the University of Utah in 1997. Prior to that, I received an M.S. in Mechanical Engineering from Utah State University in 1993 and a B.S. in Mechanical Engineering from Utah State University in 1992.

4. My areas of expertise include microscale fluid mechanics and heat transfer, superhydrophobic surfaces, electroosmotic flow transport phenomena, turbomachinery design and analysis, turbulent mixing, turbulence induced structural vibrations, convection heat transfer and fluid mechanics applications.

5. In addition to my teaching work, I consult with industry on a broad range of mechanical engineering technologies.

6. My Curriculum Vitae, which recites my technical expertise, is submitted as attached Exhibit "A."

7. I am being compensated as an expert witness at the rate of \$300 per hour for deposition or trial testimony and \$200 per hour for all other work, plus reasonable and necessary expenses incident to my work (e.g., travel, copying, hotels, meals, parking, etc.). My compensation does not depend and has never depended on any opinion expressed in this report, in any testimony that I may give, or on the outcome of this case.

II. Materials Considered

8. I understand that f'real has asserted four patents in this case: U.S. Patent Nos. 5,803,377 ("377 patent"); 7,144,150 ("150 patent"); 7,520,658 ("658 patent") and 7,520,662 ("662 patent"). The '150, '658 and '662 patents are collectively referred to as f'real's "self-rinsing patents." The asserted claims are:

Patent	Asserted Claims
'377 patent	Claims 1-4, 6, 9, 11-14, 18-22, 25 and 27
'150 patent	Claims 15, 20 and 22
'658 patent	Claims 1, 5 and 6-11
'662 patent	Claim 21

To assess whether the accused blenders and their operation would infringe the asserted claims of f'real's patents-in-suit, I have personally inspected and operated patented f'real blenders as well as Hamilton Beach's accused MIC2000 blender. I have also reviewed numerous documents including¹:

¹ "DX" refers to deposition exhibit.

DESCRIPTION
Farrell U.S. Patent No. 5,803,377 (“’377 patent”; Williams DX5)
Ex Parte Reexamination Certificate for U.S. Patent No. 5,803,377, issued March 30, 2018
Prosecution History for Farrell U.S. Patent No. 5,803,377
Tomlinson U.S. Patent No. 3,295,997 (“Tomlinson ‘997 patent”)
Prosecution History for Reexamination of U.S. Patent No. 5,803,377
Stiffler U.S. Patent No. 3,147,958 (“Stiffler patent”; Pryor DX1)
Tomlinson U.S. Patent No. 3,154,123 (“Tomlinson ‘123 patent”)
June 7, 2017 “Declaration of Jens Voges [37 C.F.R. § 1.132]” submitted during Ex Parte Reexamination of U.S. Patent No. 5,803,377 (“’377 Voges Decl.”)
Farrell U.S. Patent No. 7,144,150 (“’150 patent”; Williams DX4)
Prosecution History for Farrell U.S. Patent No. 7,144,150
July 21, 2017 “DECISION Denying Institution of <i>Inter Partes</i> Review” for U.S. Patent No. 7,144,150 (Case IPR2017-00756)
U.S. Provisional Patent Application No. 60/426,622, filed November 15, 2002
Levine’s U.S. Patent No. 4,637,221
Harr’s U.S. Patent No. 1,090,148
Farrell U.S. Patent No. 7,520,658 (“’658 patent”; Williams DX3)
Prosecution History for Farrell U.S. Patent No. 7,520,658
November 30, 2016 “DECISION Denying Institution of <i>Inter Partes</i> Review” for U.S. Patent No. 7,520,658 (Case IPR2016-01105)
July 31, 2017 “DECISION Denying Institution of <i>Inter Partes</i> Review” for U.S. Patent No. 7,520,658 (Case IPR2017-00765)
Neilson’s U.S. Patent No. 5,439,289 (Williams DX34)
Stubler’s Reissue Patent No. 25,490
Barnard’s U.S. Patent No. 4,822,175
Farrell U.S. Patent No. 7,520,662 (“’662 patent”; Williams DX2)
Prosecution History for Farrell U.S. Patent No. 7,520,662
December 19, 2017 “Final Written Decision” for Case IPR2016-001107 (U.S. Patent No. 7,520,662)

August 28, 2015 “Declaration of James J. Farrell” (Exhibit 2022 in Case IPR2016-001107; U.S. Patent No. 7,520,662; “Farrell Decl.”)
March 13, 2017 “Declaration of Jens Voges Concerning Secondary Considerations” (Exhibit 2028 in Case IPR2016-001107; U.S. Patent No. 7,520,662; “’662 Voges Decl.”)
Kelly’s U.S. Patent No. 4,740,088 (Williams DX33)
Order Construing The Terms Of U.S. Patent Nos. 5,803,377; 7,144,150; 7,520,658 and 7,520,622
Second Revised Final Joint Claim Construction Charts, filed August 15, 2017
The transcript for the December 13, 2017 deposition of Brian P. Williams (“Williams”)
The transcript for the March 22, 2018 deposition of Brian O’Flynn (“O’Flynn”)
The transcript for the March 23, 2018 deposition of Ernest Pryor (“Pryor”)
The transcript for the July 10, 2018 deposition of Benjamin Branson (“Branson”)
The transcript for the June 28, 2018 deposition of Michael Sandford (“Sandford”)
Shake Shop Express promotional videos
f’real promotional videos
REDACTED HBB Business Case Summary: Blend in Cup – Cornelius (Williams DX1; HBBF13063-13071)
UNREDACTED HBB Business Case Summary: Blend in Cup – Cornelius (HBBF171457-171465)
HBB Business Case Summary: Blend in Cup – Stand Alone (Williams DX6; HBBF13037-13044)
HBB Business Case Summary: Mix in Cup – Stand Alone (Williams DX7; HBBF13051-13057)
HBB Business Case Summary: Hershey’s Ice Cream – Mix in Cup (Williams DX8; HBBF13112-13118)
HBB Business Case Summary: Mix-in-Cup Gen 2, Auto Sanitize & Display (Williams DX9; HBBF39439-39444)
HBB Business Case Summary: Dairy Queen Hands Free Blizzard Machine (Wood DX23; HBBF13240-13250)
Hamilton Beach “SmartServe” Operation Manual for MIC2000 and BIC2000

(Williams DX10; HBBF23-32)
Hamilton Beach Service Manual for MIC2000 and BIC2000 (HBBF37890-37975)
Hamilton Beach Product Definition Spec BIC2000/BIC2000CE (Branson DX23; HBBF 129)
Hamilton Beach Product Definition Spec MIC2000/MIC2000CE (Branson DX24; HBBF 124)
Hamilton Beach Product Definition Spec IMI2000/IMI2000CE (Branson DX25; HBBF 122)
Hamilton Beach CAD drawing for cup shield assembly (Williams DX13; HBBF 1802)
MIC2000 and BIC2000 blade pictures (Williams DX40; HBBF322,438-444)
MIC2000 and BIC2000 cup shield picture (Williams DX41; HBBF332)
Williams U.S. Patent Application Publication No. 2012/0087203
Branson conception drawing for IMI2000 (Branson DX2, HBBF9300)
Hamilton Beach Cup Holder Evaluation (Branson DX22; HBBF2125-2131)
Hamilton Beach NSF Documentation Package for MIC2000 and BIC2000 (Branson DX26; HBBF1-44)
Hamilton Beach GM44 CLOSED Issue List (HBBF147920-14818)
GM44 Request for Quotation (HBBF14772-14782)
GM44 Product Disclosure (HBBF14976-14980)
BIC3000-DQ Daily Cleaning Instructions
Evaluating Whether MIC2000 Aerates Frozen Products – Initial Test (attached Exhibit “B”)
Hamilton Beach Blend-in-Cup Advertisement (Williams DX37; HCC218-219)
Hershey’s Ice Cream and Hamilton Beach Bring Milkshakes to the Masses (Williams DX39; HBBF10817-10818)
Pictures of Shake Shop Express Kiosks (O’Flynn DX5; HBBF10844-10855)
Advertisement for BIC3000-DQ Hands-Free Blizzard Machine (Blackmon DX11; FREAL5876-5877)
November 12, 2009 License Term Sheet (Wood DX3)
May 26, 2010 Patent License Agreement (Williams DX36, HBBF651-665)

Development, Technology and Supply Agreement between IMI Cornelius and Hamilton Beach (Wood DX 21, HBBF101081-101122)
Defendant Hamilton Beach Brand's, Inc.'s Response To Plaintiffs' Second Set Of Interrogatories (Blackmon DX2)
Hamilton Beach BIC2000, MIC2000 and IMI-2000 blender sales through 2017 (Williams DX44, HBBF13235)
2/10/10 e-mail from Ben Branson to Doug Anderson (O'Flynn DX2; HBBF20103)
10/20/10 e-mail from Jason Reed to Brian O'Flynn (Wood DX1, HBBF96237)
10/27-28/10 Bilateral Confidentiality Agreement (Wood DX2, HCC336)
11/3/10 e-mail from Brian O'Flynn to Zachary Waite (Williams DX15; HBBF39719-39720)
11/9/10 e-mail from Zachary Waite to Brian O'Flynn (Williams DX16; HBBF37084-37085)
11/11/10 e-mail from Brian O'Flynn to Brian Williams (Williams DX17; HBBF23153-23154)
12/15/10 e-mail from Brian O'Flynn to Hank Wood (Williams DX18; HBBF19904)
12/20/10 e-mail from Brian O'Flynn to Zachary Waite (Williams DX19, HBBF39690-39691)
Proposed Agenda for January 4-5, 2011 Hamilton Beach/Hershey Meeting (Wood DX9; HCC351)
1/4-5/11 "F'Real Product Development Schedule" notes (Williams DX14, HCC1354)
2/25/11 e-mail from Hank Wood to Jim Farrell (Wood DX19, HBBF619-623)
6/16/11 e-mail from Tom Hooker to Alex Raring (Raring DX8, HCC26756)
7/1/11 e-mail from Alex Raring to Zachary Waite (Raring DX9;HCC26761-26763)
7/6/11 e-mail from Alex Raring to Zachary Waite (Raring DX10, HCC26767)
7/6/11 e-mail from Tom Hooker to Alex Raring (Raring DX11, HCC26770-26772)
8/2/11 letter from Hank Wood to Jim Farrell terminating patent license (Wood DX12, HBBF685)
5/10/12 e-mail from Ernie Pryor to Ann Marie Blackmon (Blackmon DX14;

HBBF19873)
10/11/13 e-mail from Ben Branson to Brian O’Flynn (Williams DX22; HBBF48744-48747)
2/21/14 e-mail from Dinsh Guzdar to Paul Gobel (Guzdar DX3: FREAL226571-226575)
Installation and Operation Guide for f̄real FRLB2 blender
In-Cup Blender With Chemical-free Automated Clean-in-Place System: Model FRLB4 (FREAL131216-131220)
U.S. Published Application No. 2018/0132663 (f̄real FLRB6 blender)
Plaintiff F’real’s Notice of Rule 30(b)(6) Deposition of Defendant Hershey Creamery Company
1/16/11 e-mail from Tom Holder to Zachary Waite (Holder DX2, HCC4748-4749)
1/16/11 e-mail from Tom Holder to Zachary Waite (Holder DX3, HCC4750-4751)
11/3/10 e-mail from Brian O’Flynn to Zachary Waite (Waite DX15, HCC2980)
“Freal Style Machine” folder (Waite DX7)
4/26/13 e-mail from Zachary Waite to Tom Holder (Waite DX19, HCC5044-5045)

III. Legal Standards

9. Because I am not a lawyer, counsel for f̄real has provided me with certain legal principles to use in analyzing the infringement issues and formulating my opinions.

10. I understand that a determination of infringement is a two-step process. First, the claims are construed by the Court as needed to ascertain their proper scope. Second, the asserted claims are compared with the accused products or processes to determine whether those products or processes fall within the scope of the asserted claims.

11. I understand that the Court has construed the claim terms in dispute in its “Order Construing The Terms Of U.S. Patent Nos. 5,803,377; 7,144,150; 7,520,658; and 7,520,622,”

dated November 29, 2017 (D.I. 83; “Markman Order”). I have been told that, for purposes of this report, I should accept and use the Court’s constructions of the disputed claim terms.²

Provided below is a summary of the claim constructions made by the Court in that order:

<u>Disputed Claim Term</u>	<u>Court’s Construction</u>
“rinse chamber” (‘150 patent)	“an enclosure in which a rinse apparatus is positioned to provide rinsing”
“sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel” (‘658 patent)	“the splash shield is heavy enough to create sufficient downward force on the vessel so as to retain the vessel within the holder when the mixing element moves upwardly in the vessel from the first position to the second position when liquid is present”
“providing a mixing machine” (‘658 and ‘662 patents)	“making a mixing machine available for use”
“while isolating the vessel from the rinsing fluid” (‘662 patent)	its plain and ordinary meaning
“frozen substance” (‘377 patent)	its plain and ordinary meaning
“grinding means for ...grinding the frozen substance to form a ground substance” (‘377 patent)	a means-plus-function term where the claimed function is “grinding the frozen substance to form a ground substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile”
“shaving elements” (‘377 patent)	a means-plus-function term where the claimed function is “shaving a frozen substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile”

² I have been told by counsel that Defendant Hamilton Beach has filed a motion for partial reconsideration of certain claim terms construed by the Court in its Markman Order, but the Court has not yet ruled on Hamilton Beach’s motion. To the extent the Court alters any of its original claim constructions, I reserve the right to supplement or amend my infringement analysis.

“aeration means for ...causing air to be incorporated into a mixture” (‘377 patent)	a means-plus-function term where the claimed function is “causing air to be incorporated into a mixture” and the corresponding structure is “curved, wave-like structure(s) on a rotatable blade with a slim cross-sectional profile”
“means for directing liquid from above the upper surface of the blade assembly to below the blade assembly” (‘377 patent)	a means-plus-function term where the claimed function is “directing liquid from above the upper surface of the blade assembly to below the blade assembly” and the corresponding structure is “a rotating blade having three pairs of cutouts at the perimeter of the blade spaced 120° from each other, the cutouts including a trailing edge that is elevated above the rotational plane of the blade to form an inverted ramped surface for the liquid”
“blade assembly including shaving elements and aeration elements” (‘377 patent)	its plain and ordinary meaning
“control means for causing the blade assembly to move between upper and lower blade positions at least twice” (‘377 patent)	a means-plus-function term where the claimed function is “causing the blade assembly to move between the upper and lower blade positions at least twice” and the corresponding structure is “a microprocessor programmed to instruct the carriage motor to move the blade assembly between the upper and lower blade positions at least twice”
“control means responsive to the output of the cup sensor for generating blade rotation speed and vertical blade positioning control signals which correspond to the size of the cup detected by the cup sensor” (‘377 patent)	a means-plus-function term where the claimed function is “generating blade rotation speed and vertical blade positioning control signals which correspond to the size of the cup detected by the cup sensor” and the corresponding structure is “a microprocessor programmed to generate control signals for the carriage motor to vertically position the blade assembly and for the blade motor to rotate the blade at pre-determined speeds corresponding to the size of the cup detected by the cup sensor”

<p>“control means for generating up and down blade movement control signals and blade rotation control signals” (‘377 patent)</p>	<p>a means-plus-function term where the claimed function is “generating up and down blade movement control signals and blade rotation control signals” and the corresponding structure is “a microprocessor programmed to generate control signals for the carriage motor to move the blade assembly up and down and for the blade motor to rotate the blade”</p>
<p>“control means is further for generating blade speed control signals to reduce the rotational speed of the blade assembly when the blade assembly is moved to a first level and to increase the rotational speed of the blade assembly when the blade assembly is moved to a second level” (‘377 patent)</p>	<p>a means-plus-function term where the claimed function is “generating blade control signals to reduce the rotational speed of the blade assembly when the blade assembly is moved to a first level just below the milkshake surface and to increase the rotational speed of the blade assembly when the blade assembly is moved to a second level just above the milkshake surface” and the corresponding structure is “a microprocessor programmed to generate a control signal to the blade motor as mixing is being completed to reduce the rotational speed of the blade when it is just below the milkshake surface (first level) and the, for ‘spin off,’ to increase the rotational speed of the blade when it is just above the milkshake surface (second level).”</p>
<p>“control means responsive to activation of the initiation switch and the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch” (‘377 patent)</p>	<p>a means-plus-function term where the claimed function is “generating the blade movement control signals and the blade rotation control signals in response to activation of the initiation switch and the output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch” and the corresponding structure is “a microprocessor programmed to generate, after receiving appropriate inputs from the initiation switch that the user wants to begin blending and from the cup sensor that a cup is detected in the cup support, control signals to the carriage motor to lower the blade assembly into the cup and to the blade motor to rotate the blade assembly”</p>

12. I further understand that the parties agreed to the construction of additional claim terms as set forth in the parties' "Second Revised Final Joint Claim Construction Charts," filed with the Court on August 15, 2017 (D.I. 62). I have been told that, for purposes of this report, I should also accept and use the claim constructions the parties have agreed to. Provided below is a summary of the claim constructions the parties have agreed to as set forth in the parties' "Second Revised Final Joint Claim Construction Charts":

<u>Claim Term</u>	<u>Agreed Upon Construction</u>
"vessel" ('150, '658 and '662 patents)	"cup or container"
"splash shield"/"shield" ('150, '658 and '662 patents)	"lid for the cup opening"
"splash shield positionable covering the opening of the vessel" ('150 patent)	"lid positionable to cover most of the cup opening"
"splash shield ... covering the opening of the vessel" ('658 patent)	"a lid covering most of the cup opening"
"splash shield shielding the vessel opening" ('662 patent)	"a lid covering most of the cup opening"
"positioning the shield in contact with the vessel to cover the opening of the vessel" ('658 patent)	"positioning the splash shield lid in contact with the cup opening in order to cover most of the cup opening"
"at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber" ('150 patent)	"one or more nozzles coupled to a rinse fluid source and pointed at the splash shield to directly spray fluid onto a surface of the splash shield within the rinse chamber"
"characteristic of a cup" ('377 patent)	"a physical attribute of a cup"
"unrestrained against sliding movement on the shaft in a direction away from the opening"/"unrestrained against upward movement away from the opening" ('658 patent)	"without any other mechanical means of restraining the upward sliding movement of the splash shield on the shaft apart from the mass or weight of the splash shield itself"

13. I have been told that when claim elements are phrased as a "means" to perform a particular function, I should look to the specification of the patent and interpret that language in light of the corresponding structure, material or acts described in the specification, and

equivalents thereof. To the extent that the Court has already done this interpretation of a “means-plus-function” claim element in its Markman Order, I have been told to use the Court’s claim construction. In subsequently determining whether a “means-plus-function” claim element is present in an accused device, I have been told to determine whether the means in the accused device which performs the function stated in the claims is the same as or equivalent to the corresponding structure described in the patent as performing that function.

14. For those claim terms that are not in a “means-plus-function” form and have not been construed by the Court, I have been told to interpret those claim terms in accordance with their plain and ordinary meaning to one of ordinary skill in the art at the time of the invention, in a manner that is consistent with the patent specification.

15. To assess the level of ordinary skill in the art, I have been told that one considers the type of problems encountered in the art, the prior solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology and the level of education of active workers in the field. In this case, I have reviewed each of the patents-in-suit, considered the type of problems encountered in the art, the prior solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology and the level of education of active workers in the field. In addition, I considered my own experience teaching and performing research in the mechanical engineering field, as well as my experience collaborating and consulting with companies on mechanical engineering projects. Further, I have considered the findings of the U.S. Patent and Trademark Office about the applicable level of ordinary skill in the art as set forth in the “Final Written Decision” for the *inter partes* review proceeding involving f’real’s ‘662 patent.³ Based upon my assessment, I agree with the U.S.

³ IPR2016-01107 (“‘662 patent IPR”), Paper 40 at p. 18.

Patent and Trademark Office that a person of ordinary skill in the art for the patented technology at issue in this action would be an engineer with at least an undergraduate degree in mechanical engineering or related discipline and at least three years of professional or research experience in the design of consumer or medical products that utilize fluid systems.⁴

16. I understand that patent infringement occurs when someone makes, uses, sells, offers to sell, imports any patented apparatus, system or method without authorization to do so from the patent owner. To infringe a claim literally, the apparatus, system or method must include each element of that claim literally. If one or more claim elements are missing from the accused apparatus, system or method, then the claim is not literally infringed by such apparatus, system or method. Nonetheless, an accused apparatus, system or method that does not literally infringe a claim may still infringe the claim under the Doctrine of Equivalents (“DOE”) if the differences between the accused apparatus, system or method would be considered insubstantial to one of ordinary skill in the art. I have been told that any analysis under the DOE must be performed on an element-by-element basis. One test of whether any differences are insubstantial is whether an element of an accused apparatus, system or method performs substantially the same function in substantially the same way and with substantially the same result as the claimed element would. Another consideration is whether one of ordinary skill in the art would know that a claimed element and a corresponding element of an accused apparatus, system or method was interchangeable at the time of infringement. I have been told that application of the DOE is subject to certain limitations, including the limitation that amending a claim during prosecution of a patent to add the claim limitation at issue can prevent the patent owner from using DOE for

⁴ The Patent Trial and Appeal Board at the U.S. Patent and Trademark Office accepted the definition of a person of ordinary skill in the art provided by Hamilton Beach’s technical expert, Dr. Slocum. See, ‘662 patent IPR, Paper 40 at p. 18.

that claim element to establish infringement. This is known as the doctrine of prosecution history estoppel.

17. I understand that infringement can be direct or indirect. Direct infringement is when a person or entity is directly responsible for the acts that constitute infringement, for example, by performing those acts themselves, or alternatively by directing or controlling the actions of another. Indirect infringement occurs when the accused infringer is responsible for causing or encouraging another person or entity to infringe, or to contribute to the infringement of another, and the other infringes the patent directly. I understand that both direct and indirect infringement can occur both literally and by equivalents.

18. I understand there are two types of indirect infringement: induced infringement and contributory infringement. Both induced infringement and contributory infringement require proof of direct infringement of a patent claim. Induced infringement occurs when: (1) the defendant acted with the intent to encourage, aid, instruct or otherwise cause another to commit an act or acts that would constitute direct infringement; (2) the defendant at the time had knowledge of or was willfully blind to the existence of the asserted patent and the defendant's actions would lead the other party to directly infringe; and (3) the other party infringed at least one claim of the asserted patent. Contributory infringement occurs when a defendant provides a material part or a component to another for use in a product, machine, or process that directly infringes and that defendant: (1) had knowledge of the asserted patent, (2) sold or provided a component that is a material component of the claimed invention, (3) knew that the component was especially made for use in a manner that infringes, (4) the component does not have a substantial non-infringing use and (5) the component is used in a manner that infringes the patent.

19. Although I express no opinion about the amount of damages that may be awarded in this case, I understand that the existence of (or lack of) a commercially-acceptable and available non-infringing alternatives to the product accused of infringement can be relevant to the determination of damages should an accused product be found to infringe. Such alternatives must be: (i) non-infringing, (ii) available, and (iii) commercially acceptable or adequate. Multiple considerations are relevant to whether a proposed alternative was a commercially-acceptable (or adequate) substitute in the marketplace for the accused product at the date of first infringement, including: (i) the realities of the marketplace; (ii) whether the accused infringer selected the accused infringing product rather than the alleged available, acceptable alternative; (iii) whether the alleged acceptable non-infringing substitute possesses characteristics significantly different from the patented product; (iv) the maturity of the proposed alternative technology; (v) whether purchasers are motivated to purchase because of particular infringing features of a product that are not available in the alleged non-infringing substitute; and (vi) the cost and/or difficulty of implementing the alleged substitute.

20. I understand that the question of whether an accused infringer copied the patented technology may be relevant to several issues, including a determination of willful infringement, establishing infringement under the doctrine of equivalents, defending against an allegation of obviousness and measuring damages. I understand that copying can be shown by direct or indirect evidence and there are numerous circumstances that can support an inference of copying including, but not limited to: (1) when a defendant was aware of plaintiff's product and technology and developed a similar infringing product after obtaining general knowledge of plaintiff's technology; (2) when a defendant uses plaintiff's patents and products as a roadmap to develop its own products; (3) when market pressures prompted a defendant to develop a product

with characteristics of plaintiff's product; (4) when a defendant is aware of plaintiff's patent, uses plaintiff's patented product as a template for creating its own, and also copies unpatented element of plaintiff's products; (5) when a defendant has a history of copying plaintiff's designs; and (6) when a defendant hires plaintiff's former employee that had knowledge of plaintiff's patented technology.

IV. f'real's Patented Technology

21. The technology at issue in this action generally involves self-rinsing commercial blenders and related processes that can be used for reconstituting single serving frozen beverages, especially frozen milkshake beverages, in a sanitary manner.

22. At the time Jim Farrell founded f'real in the 1990's and began work on the inventions of the patents-in-suit, milkshakes and smoothies were traditionally prepared behind the counter at restaurants and fast food chains (Farrell Decl., ¶2). At a restaurant, the server would typically place the milkshake ingredients into a large metal cup, hold the cup under a spindle mixer to mix the ingredients, and then pour the mixed ingredients into a glass to serve the customer. *Id.* After the meal, the metal cup and glass would need to be scrubbed clean before they were reused. *Id.*



23. For fast food chains, the milkshakes and smoothies were often prepared from premixed ingredients in a large machine and, upon demand, dispensed by the server into a disposable cup, which was sold to the consumer (Farrell Decl., ¶2). Periodically, the pre-mixed container would need to be emptied by the server and cleaned. *Id.*



24. Both of these traditional approaches take place behind the counter, are labor intensive and require a substantial amount of clean-up after the milkshakes are prepared and dispensed ('662 Voges Decl., ¶ 5).

25. For most of the convenience store market, the traditional labor-intensive approach is too inefficient and time-consuming to be a viable option ('662 Voges Decl., ¶6). At a convenience store, there may be only one or two employees on duty at any given time to handle all the responsibilities of running the convenience store. *Id.* Typically, the convenience store employees spend most of their time restocking the store shelves and refrigerators as well as manning the cash register to accept payment for food, beverages, gasoline and other items purchased by the consumer. *Id.* A busy convenience store attendant typically does not have time to clean up every time a consumer wants a milkshake. *Id.*

26. If the equipment is not cleaned on a regular, timely basis, disease-causing bacteria will grow on the milkshake equipment ('662 Voges Decl., ¶8). If a consumer becomes sick from

such disease-causing bacteria, it could be disastrous for both the consumer and retailer. *Id.* Also, if cleanup is not done between milkshakes, the flavor from one milkshake can carry over to the next. *Id.* Inadvertently mixing flavors in this way is, to put it mildly, very unappealing for consumers. *Id.*

27. During the mid-1990's, Mr. Farrell came up with the idea of preparing milkshakes from high quality ingredients outside the restaurant setting, placing those milkshakes in single serving cups and then hard-freezing those single serving cups for shipment to convenience stores and fast food restaurants (Farrell Decl., ¶3). The second part of Mr. Farrell's idea was designing a special blender for the frozen milkshakes that the consumer could use on their own at a convenience store or fast food restaurant (i.e., self-serve). *Id.*

28. Mr. Farrell first took on the problem of building a blender that could convert a frozen milkshake into the type of old-fashioned milkshake texture that consumers desire (Farrell Decl., ¶4; '662 Voges Decl., ¶10). He discovered that adding liquid to the frozen milkshake and aerating during the blending process made it easier to produce the old-fashioned texture. *Id.* For his first generation blender inventions, Mr. Farrell received U.S. Patent No. 5,803,377 (Farrell Decl., ¶4; '662 Voges Decl., ¶11).

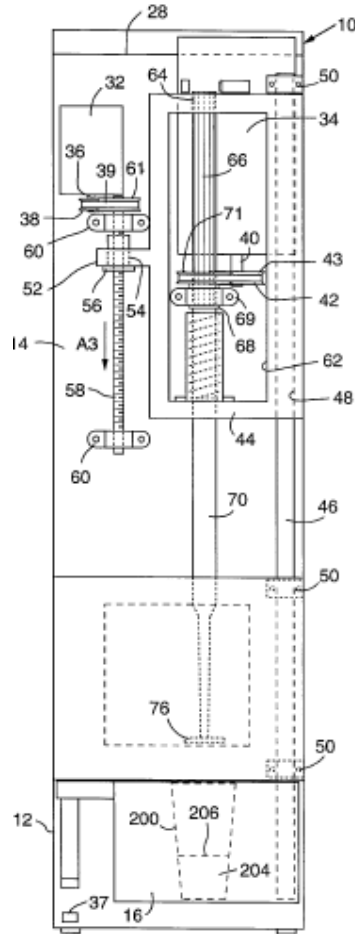


29. The next technical challenge Mr. Farrell faced was creating a method to automatically clean his blender (Farrell Decl., ¶5). To address the need for cleanliness, Mr.

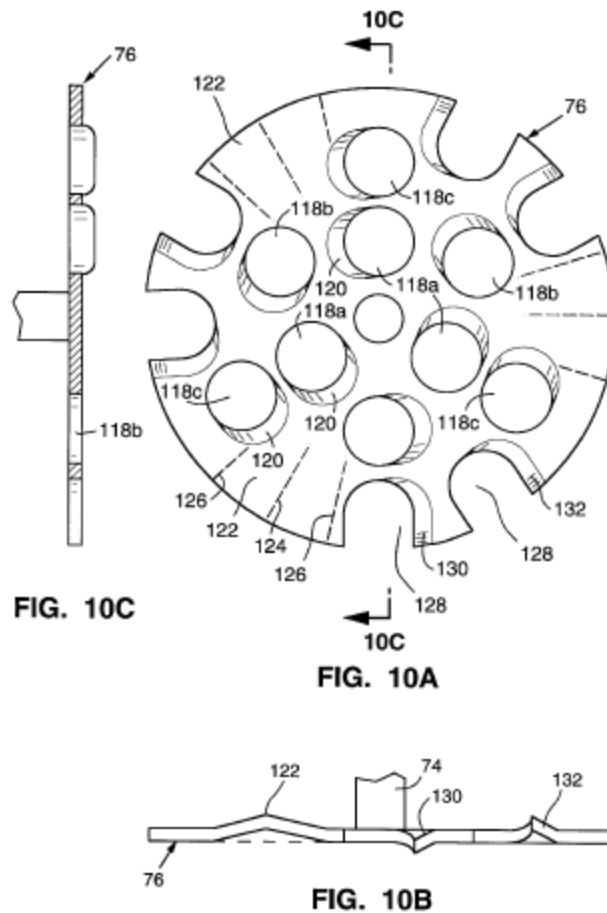
Farrell developed a system with would both automatically minimize the amount of food particles released into the food preparation chamber during milkshake preparation and then automatically clean the chamber after the milkshake was prepared and removed from the chamber. *Id.* Mr. Farrell minimized the release of food particles by having the blender automatically place a splash shield over the top of the milkshake cup during blending. *Id.* When blending was complete, the blender automatically cleaned the blending chamber, including the splash shield, with rinse nozzles after the fully prepared milkshake was removed by the consumer. *Id.*

A. f'real's Reconstituted Milkshake Patent: U.S. Patent No. 5,803,377

30. The apparatus disclosed and claimed in the '377 patent is designed to reconstitute a milkshake or other drink pre-frozen in a cup into a "customer preferred old fashioned texture milkshake or other frozen drink that will fit into the operational constraints of today's high volume fast-food restaurants" ('377 patent, 1:44-47). As described in the '377 patent, a preferred form of blending apparatus has a rotatable blade 76 at the lower end of shaft 66 which is in turn connected to blade motor 34. A carriage 44 holding the blade shaft 66 and connected to a carriage motor 32 allows the rotatable blade 76 to be lowered into cup 200 to blend/reconstitute the frozen into a cup drink 204 and then raised out of the cup once the blending/reconstituting process is complete. Figure 2 of the '377 patent is shown below:



31. The rotatable blade(s) 76 of the ‘377 patent is carefully designed to be able to both bore through and aerate the frozen substance during the blending/reconstituting process (see ‘377 patent, 7:7 – 8:30). Although other configurations are contemplated by the claims, a preferred form of rotatable blade 76 is shown in FIGS. 10A-C of the ‘377 patent:



32. An “important feature” of the ‘377 patent’s rotatable blade(s) is that it has a “slim cross-sectional profile” to “avoid excessive rotation of the entire contents of the cup” (‘377 patent, 9:11-15). To bore through the frozen substance, the preferred rotatable blade 76 shown in FIGS. 10A-C has depressed regions 120 formed immediately adjacent to holes 118a-c (‘377 patent, 7:19-21). The “depressed regions 120 grate through the frozen substance much like the grating action of a cheese grater” to allow frozen substance shavings to pass through holes 118a-c (‘377 patent, 7:22-27). For the preferred rotatable blade 76, a trailing edge 130 along the perimeter of the blade is also “depressed to act as a grating surface to bore through the frozen substance at the outermost radius of the blade” (‘377 patent, 7:48-54). This configuration “provides for easy manufacture in a stamping operation, and maintains the mechanical strength

of the blade so that its outside edges are not deflected upward by the force of the frozen substance being bored through” (‘377 patent, 7:29-33).

33. To aerate the frozen substance while it is being reconstituted, “three waves are formed in the [preferred] blade” illustrated in FIGS. 10A-C (‘377 patent, 7:36). “[E]ach of the waves 122 includes a center crease 124 which is elevated above the plane of the blade and side creases 126 which lie in the plane of the blade” (‘377 patent, 7:36-38). “During high speed rotation of the blade, the waves 122 increase the whipping effect of the blade by causing an alternately high and low pressure zone at the blade’s edge, creating turbulent eddies which cause a whipping effect” (‘377 patent, 7:42-47).

34. To help prevent the blade 76 from carrying ingredients up and out of the cup as the blade is lifted from the cup, an elevated trailing edge 132 is included on the preferred blade 76 (‘377 patent, 7:58-64). “The trailing edge 132 is elevated to act as a inverted ramped surface to force milkshake downward in the cup and thereby minimize the amount of milkshake that is driven up the interior walls of the cup by centrifugal force” (‘377 patent, 7:55-58).

35. To facilitate reconstituting, milk or other liquid (e.g., water) may be added. In a preferred embodiment, “[a]t the time boring begins, the milk pump is activated and begins pumping milk into the cup through tube 24 for mixing and whipping with the small frozen particulate being created by the boring action of the blade” (‘377 patent, 8:24-27).

36. To optimize the ability of the ‘377 blending apparatus to reconstitute a frozen into a cup drink, the ‘377 patent discloses electronic control features including a microprocessor and various sensors. For example, limit switches 33, 33b are disclosed as cup sensors to sense both the presence of a cup in the apparatus housing and its size (‘377 patent, 6:44-67). Through use of these cup sensors, the microprocessor can determine the appropriate quantity of fluid to be

delivered to the cup during the blending process and appropriately set other blending parameters ('377 patent, 6:58-67). An optical detector 88 is also disclosed to ascertain when the blade reaches the bottom of the cup during the blending process and thereby insure that the blade does not grind into the cup itself ('377 patent, 5:43-61).

37. The application for the '377 patent was filed on February 5, 1997. In the only office action, the pending claims were rejected as being anticipated by Tomlinson's '997 patent. The Tomlinson '997 patent discloses an automated milkshake machine having a pyramid shaped blade assembly formed by three sets of cutter blades. In its February 2, 1998 office action response, f'real successfully distinguished the Tomlinson '997 patent "because Tomlinson fails to disclose or fairly suggests means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser." The application for the '377 patent was allowed on March 16, 1998 and the '377 patent issued on September 8, 1998.

38. The '377 patent has 27 claims, of which claims 1, 11 and 27 are the independent claims. Each of independent claims 1, 11 and 27 recite in various forms a housing, a cup support mounted to the housing, grinding means/shaving elements and aeration means/aeration elements. *Id.* Independent claims 1 and 27 also recite a "liquid dispenser" to direct liquid into the cup (claims 1, 27). A number of the dependent claims reference a cup sensor and its various attributes including detecting cup presence, detecting cup size and using the cup sensor in cooperation with a microprocessor to control the amount of liquid dispensed or the limits of blade movement (see claims 5-6, 9-10, 19, 22-26). Other dependent claims are directed to features of the grinding element(s), aeration element(s) or liquid dispenser (see claims 2-3, 8, 13-

14, 16-17). Some dependent claims recite the motorized movement of the carriage holding the blade assembly (see, claims 15, 20-22).

39. Representative and asserted independent claim 1 of the ‘377 patent reads as follows:

1. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:
 a housing;
 a cup support mounted to the housing;
 a liquid dispenser having an outlet positioned to direct liquid into a cup positioned in the cup support;
 grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance; and
 aeration means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser.

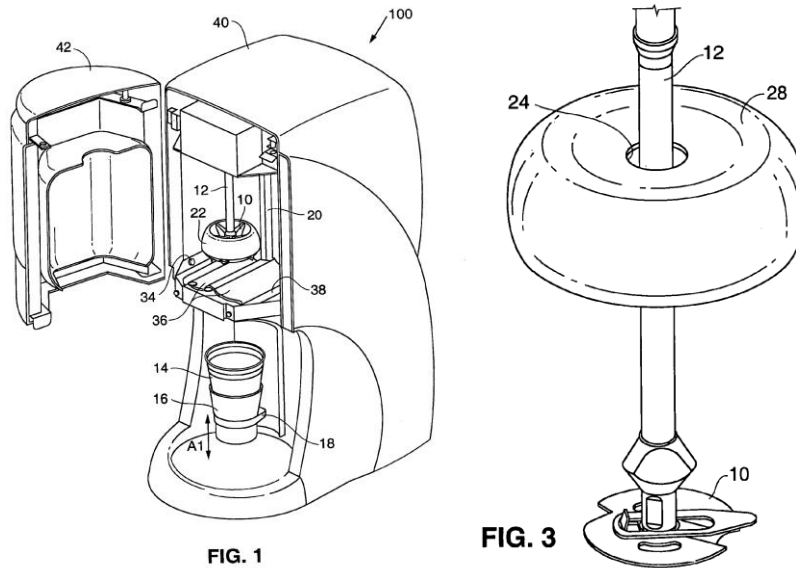
B. f’real’s Self-Rinsing Blenders Patents: U.S. Patent Nos. 7,144,150; 7,520,658 and 7,520,662

40. The f’real self-rinsing blender patents, the ‘150, ‘658 and ‘662 patents, disclose a blender that minimizes the amount of food particles released into a food preparation chamber during milkshake⁵ preparation and then automatically cleans the chamber (‘150 patent, 2:6-22, 57-64; ‘658 patent, 1:18-24, 63-67; ‘662 patent, 1:63-67). The release of food particles is minimized by placing a weighted splash shield on top of the milkshake cup prior to blending so that the top opening of the cup is mostly covered during the blending process (‘658 patent, 1:48-49). When the blending process is complete and the blended milkshake cup is removed, the

⁵ For purposes of this report, the term “milkshake” is used to generically refer to a frozen blended beverage, which could, for example, be a milkshake, smoothie, or other frozen blended beverage.

blender automatically rinses the blending chamber and weighted splash shield by spraying cleaning fluid through pre-positioned interior nozzles. *Id.*

41. FIGS. 1 and 3 of the f'real's self-rinsing blender patents illustrate a preferred embodiment:



42. The mixing machine 100 has a cup holder 16 into which the user can place their pre-filled cup 14. The preferred cup holder shown in FIG. 1 is shaped like a larger version of the cup so that, when the cup is inserted, the cup holder supports the cup 14 on its bottom and lower sides. The cup holder is connected to a motorized vertical rail 20 that can lift the cup into the blending chamber defined, in the preferred embodiment, by enclosure 40, access door 42 and hinged doors 36 ('150 patent, 2:64 – 3:13, 3:44-47)⁶. As the top of the cup enters the blending chamber, it contacts the underside of a splash shield 22 in such a way that the splash shield covers the top opening of the cup like a lid ('150 patent, 3:17-32; '662 patent, 3:23-27, 4:37-38).

⁶ Alternatively, the mixing blade may be lowered while the cup and cupholder remain in place ('150 patent, 3:13-16)

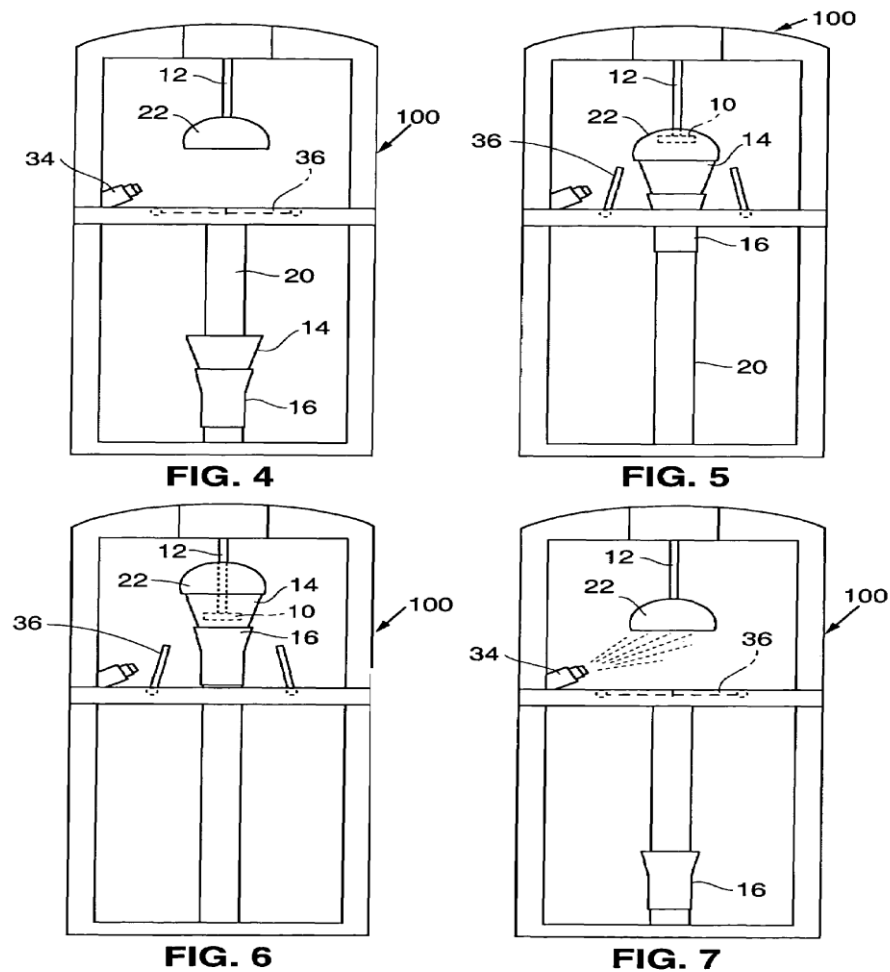
The only portion of the cup that is preferably uncovered corresponds to the splash shield opening 24, 26 through which the mixing blade shaft 12 passes. *Id.* While the splash shield 22 remains connected to the mixing blade 10 in the downward direction by the tapered portion of the mixing blade, the splash shield is designed to be largely free floating or unrestrained in its upward movement ('150 patent, 3:17-32). This unrestrained movement allows the splash shield to automatically move up and down with the milkshake cup during the active blending process while keeping the milkshake cup effectively covered the whole time ('658 patent, 2:57-64, 3:5-8,58-64).

43. A problem faced by Mr. Farrell in his efforts to minimize the amount of food particles released into the food preparation chamber during milkshake preparation was the upward force on the milkshake created by the rotating mixing blade ('150 patent, 4:4-29; '658 patent, 4:6-14; '662 patent, 4:55-58). If upwardly splashing milkshake knocked off the splash shield, the result would be a blending chamber filled with milkshake residue. As noted in the specification of f'real's self-rinsing blender patents, prior efforts to address this problem, including Neilson's U.S. Patent No. 5,439,289 ("Neilson patent"), required springs, clamping and/or other mechanisms ('150 patent, 4:5-9; '658 patent, 3:65-4:20). These approaches are explicitly distinguished by f'real's self-rinsing blender patents. *Id.* Mr. Farrell's solution was to make the splash shield of sufficient mass when used in conjunction with the cup holder to overcome the upward lifting force of the milkshake ('150 patent, 4:4-29; '658 patent, 4:3-20). In one preferred embodiment, the weighted splash shield is made of stainless steel and weighs approximately 5 lbs. ('658 patent, 4:26-28).

44. To automatically clean the splash shield after mixing, Mr. Farrell relied upon carefully positioned rinse nozzles ('150 patent, 3:32-38). As illustrated in FIGS. 1 and 4-7, "one

or more nozzles 34 (only one is shown) are provided for directing fluid onto the interior of shield 22. Nozzles 34 are coupled to one or more sources of rinse fluid, such as water (preferably hot or warm water) and/or sanitizing solution such as a quaternary ammonium sanitizer solution” (‘150 patent, FIGS. 1 and 4-7, 3:33-38). In the preferred embodiment, a fluid trough 38 and drain line are used to collect and dispose of the used rinse water (‘150 patent, 3:39-47).

45. FIGS. 4-7 illustrate a preferred process of mixing and automatic cleaning disclosed in the specification of f’real’s self-rinsing blender patents:



46. As shown in FIG. 4, the user first positions the food containing cup in the cupholder and pushes the start button (‘150 patent, 3:52-59; ‘662 patent, 32-35). Next, as shown

in FIG. 5, the cup and cupholder are raised until “the upper edge of cup 14 [comes] into contact with the shield 22” (‘150 patent, 3:56-59; ‘662 patent, 4:35-38). As shown in FIG. 5, the lower surface of the splash shield effectively covers the cup opening to prevent splashing of food particles into the food preparation chamber during the mixing process. The cup and cupholder then move up and down as shown in FIG. 6 during the mixing process (‘150 patent, 3:59-62; ‘662 patent, 4:38-42). Because the splash shield is weighted and largely free-floating in the preferred embodiment, it remains on top of the cup opening during the mixing process.

47. When the mixing process is concluded, the cupholder and cup are lowered until “the cup 14 separates from the shield 22 and is moved by the holder 16 to the position shown in FIG. 4. The cup may then be removed from the drink machine 100” (‘150 patent, 4:34-37; ‘662 patent, 5:9-16). Next, the hinged doors 36 are automatically closed in the preferred embodiment and “rinse fluid is directed onto the shield 22 using nozzles 34 as shown in FIG. 7” (‘150 patent, 4:38-40; ‘662 patent, 5:18-22). “If desired, the [mixing] shaft 12 may be rotated during and after rinsing” to better distribute the rinse water within the food preparation chamber (‘150 patent, 4:40-44; ‘662 patent, 5:23-34). In the preferred embodiment, “[t]he shield, blade and closed doors 36 shed the rinse fluid into trough 38, which then directs the water out of the machine via the drain line” (‘150 patent, 4:47-50; ‘662 patent, 5:34-36).

48. All of f’real’s self-rinsing blender patents claim priority to U.S. Provisional Patent Application No. 60/426,622, filed November 15, 2002. This provisional patent application discloses key features of f’real’s self-rinsing blender patent inventions including the basic blender design of the ‘377 patent, rinsing of the lid between uses by directing a water spray at the shield, a weighted splash shield, placement of the splash shield on the mixing blade, movement

of the splash shield with the cup during blending and unrestrained movement of the splash shield on the mixing blade.

49. On November 17, 2003, f'real filed U.S. Patent Application No. 10/715,171 which eventually matured into the '150 patent. During prosecution of the '150 patent, the examiner initially rejected the pending claims as being obvious in view of the Nielson patent, Levine's U.S. Patent No. 4,637,221 and Harr's U.S. Patent No. 1,090,148. In response to that office action, f'real amended the asserted claims to recite a "rinse chamber" and noted that the references cited by the examiner did not have such a feature. On August 30, 2006, the application that matured into the '150 patent was allowed and the '150 patent was subsequently issued on December 5, 2006.

50. Representative asserted independent claim 15 of the '150 patent reads as follows:

15. On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing contents of the vessel, the improvement comprising:

a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;

a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and

at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield within the rinse chamber.

51. On April 28, 2005, f'real filed U.S. Patent Application No. 11/116,497 as a continuation-in-part of the patent application for the '150 patent. This continuation-in-part patent application eventually matured into the '662 patent. During prosecution of the '662 patent, the examiner's only rejection was based upon the potential for double patenting in view of f'real's '150 patent. For the asserted claims, f'real overcame this rejection by filing a terminal

disclaimer. On January 12, 2009, the application that matured into the '662 patent was allowed and the '662 patent was subsequently issued on April 21, 2009.

52. Asserted independent claim 21 of the '662 patent reads as follows:

21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing material to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.

53. On November 22, 2005, f'real filed U.S. Patent Application No. 11/284,646 as a divisional of the patent application for the '150 patent. This divisional patent application eventually matured into the '658 patent. During prosecution of the '658 patent, the examiner initially rejected the pending claims based upon various combinations of Stubler's RE 25,490, Barnard's U.S. Patent No. 4,822,175 and Harr's U.S. Patent No. 1,090,148. To overcome these references, f'real noted that its splash shield does not require either Harr's spring or the user's hand in Barnard to keep the splash shield on top of the cup during mixing. Use of a movable, weighted splash shield in f'real's invention accomplishes these objectives. On March 6, 2009, the application that matured into the '658 patent was allowed and the '658 patent was subsequently issued on December 5, 2006.

54. Representative asserted independent claim 1 of the '658 patent reads as follows:

1. A mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine comprising:

a holder coupled to the mixing machine, the holder proportioned to receive a vessel;

a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;

a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;

a shaft; and

a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.

V. The Accused Products and Methods

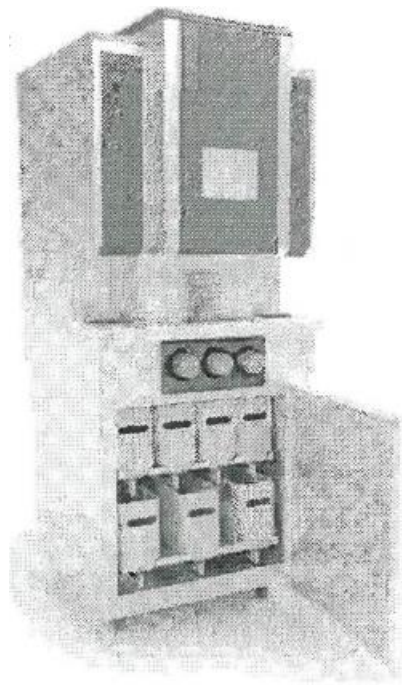
A. Hamilton Beach IMI2000 Blender

55. In 2009, IMI Cornelius wanted to build a drink machine for fast food restaurants to automatically prepare smoothies in disposable cup (Williams DX1, HBBF13065; Pryor, pp. 6-10; Williams, pp. 182-184). IMI Cornelius was a world leader in the manufacture of chilled beverage equipment. *Id.* While IMI Cornelius had expertise in building machines to dispense ice and drinks, they wanted Hamilton-Beach to develop a blender module that would fit within their larger piece of drink dispensing machine. *Id.* The larger IMI Cornelius machine would dispense ice and liquid ingredients into a cup, move the cup over to the Hamilton Beach module and the Hamilton Beach module would then blend the drink in the cup. *Id.* After blending, IMI Cornelius expected the Hamilton Beach blender module to automatically sanitize itself before the next drink was blended. *Id.* IMI Cornelius made it clear that the cleansing process needed to be

automatic – manual spray cleaning was not an acceptable option. *Id.* Manual rinsing was perceived as “going backward” (Williams, pp. 182-184).

56. To get ideas for building the IMI2000 blender module, Hamilton Beach’s engineers, Brian Williams and Ben Branson, visited their local Wawa convenience store in Glen Allen, Virginia to inspect one of f’real’s self-rinsing blenders (Williams, p. 17-21; Branson, pp. 9-11). As part of that inspection, they watched preparation of a f’real milkshake. *Id.*

57. During 2009 and 2010, Hamilton Beach began developing a prototype blender that could be inserted into the larger IMI Cornelius drink machine. Hamilton Beach designated this blender as the “IMI2000” (Williams, pp. 100, 112-114; Williams DX1, HBBF13069):



58. The internal configuration of this IMI2000 blender module is illustrated, among other places, in the “Product Definition Spec IMI2000/IMI2000CE” (Branson DX2 and DX25; Branson, pp. 98, 110; Raring DX9, HCC26762; Raring, pp. 165-166; Williams, pp. 127-130; Williams DX10, HBBF25). The IMI2000 has a cylindrically-shaped cup shield which moves up

and down during the blending process. *Id.* The cup shield starts in a raised position to allow the customer's cup to be inserted into the IMI2000 cupholder. *Id.* The cup shield and mix motor are then lowered by a carriage stepper motor and lead screw until the surface of the cup shield lid contacts the top of the cup and at least partially forms a seal around the cup. *Id.* The carriage motor then lowers the mix motor further and the mix motor is then activated to begin the blending process. *Id.* The carriage motor and mix motor drive the blade into the cup and can make several passes within the cup to complete a blending process. The weight of the splash shield lid assembly in conjunction with the cup holder prevents the cup from rotating. *Id.* Due to its free-floating design, the cup shield continues to rest on top of the cup as the carriage motor, mix motor and blade move up and down during the blending process. *Id.* Once the contents of the cup are fully blended, the mix motor and cup shield are raised so the cup can be removed and served to the consumer. *Id.* After the cup has been removed, the mix motor and cup shield are again lowered by the carriage motor so that the food zone (i.e., cup shield lid, mix motor shaft, blade/agitator) is automatically rinsed by several jets of water coming from pre-positioned nozzles within the wash chamber. *Id.* After this wash cycle, the mix motor and cup shield are raised so another cycle can begin. *Id.*

59. The rinse nozzles in the IMI2000 are located below the cup holder and pointed upward toward the splash shield lid (Branson, pp. 61-62). The idea is for the IMI2000 spray nozzles to act like a bidet (Branson, pp. 9-10).

60. During their joint development efforts, Hamilton Beach and Cornelius learned that f'real had patent rights, specifically f'real's '662, '658 and '150 self-rinsing blender patents, for the self-rinsing blender technology they were planning to use for the IMI2000 (see Williams DX1, HBBF13067; HBBF0171457-165; Wood DX21). Hamilton Beach approached f'real

about obtaining a license under f̄real’s self-rinsing blender patents. *Id.* In response, f̄real indicated that it was only willing to grant a limited license that would not allow Hamilton Beach blenders to compete with f̄real in the self-serve convenience store market (Wood DX3; Williams DX36). Based upon f̄real’s restrictions, f̄real and Hamilton Beach signed a “License Term Sheet” on November 11, 2009 and then a formal “Patent License Agreement” on May 26, 2010. *Id.* The license documents demonstrate that Hamilton Beach was fully aware of f̄real’s self-rinsing blender patents no later than November 11, 2009 and aware by the same date that the self-rinsing blender features they were building into their accused blenders were covered by f̄real’s self-rinsing blender patents. *Id.* Significantly, the “HBB Business Case Summary” prepared for the IMI2000 notes: “The method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f̄REAL (who have IP in this area that we intend using) and HBB... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)” (UNREDACTED “HBB Business Case Summary”, HBBF171458).

61. Through the end of 2017, Hamilton Beach reports sales of 597 IMI2000 modules to IMI Cornelius and generated \$744,927 of revenue from those sales (Williams DX44). Hamilton Beach made numerous demonstrations of the IMI2000 to prospective customers, including Ben Branson’s demonstrations to Taco Bell and a college in Pennsylvania (Branson, pp. 99-102). During those demonstrations, Mr. Branson performed all the steps of claim 21 of the ‘662 patent. *Id.*

B. Hamilton Beach's MIC2000 Blender and Hershey's "Shake Shop Express"

62. Early in their development of the IMI2000 blender module, Hamilton Beach considered leveraging the IMI2000 development efforts to build a similar blender they could sell as a "stand alone" blender (Williams DX1, HBBF13065; Williams DX 6). Hamilton Beach got their opportunity when they were approached by co-defendant Hershey Creamery Company ("Hershey") in October 2010 about jointly working on a blender for frozen milkshakes and smoothies (Wood DX1). To quickly move their discussions forward, Hershey and Hamilton Beach signed a "Bilateral Confidentiality Agreement" on October 27-28, 2010 (Wood DX2, HCC336).

63. From their correspondence, it quickly became clear that Hershey and Hamilton Beach were planning to use a "stand alone" version of the IMI2000 blender to compete with f'real in the self-serve convenience store market (Williams DX16-19). In a November 8, 2010 e-mail, Hershey told Hamilton Beach that they had "done a lot of work here on f'real," including finding detailed information about the formulation of f'real's frozen milkshakes (Williams DX16). The next day, Hamilton Beach responded, "[t]hanks for looking at the f'real product, testing it, and determining how much water is added. This is good" (Williams DX16). On November 11, 2010, Hershey forwarded a picture of the inside of the f'real blender to Hamilton Beach, adding "[y]ou probably already saw but here it is" (Williams DX17). On December 15, 2010, Hamilton Beach sent an e-mail to Hershey about a high level meeting on January 4-5, 2011 at Hamilton Beach's headquarters to launch their joint venture together into the self-serve convenience store market (Williams DX18). During that meeting, "[p]arts of the detailed discussion will probably be our thoughts on how to convert this [IMI2000] into a self serve machine, a demo the unit & attempting to mix f'REAL shakes, next steps and approximate timing" (Williams DX18). To remove any doubt about their goal of competing head-to-head with

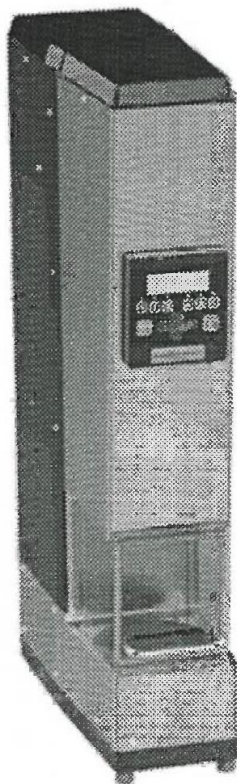
f'real in convenience stores for self-serve frozen milkshakes, Hershey wrote to Hamilton Beach on December 16, 2010: "We had a great meeting yesterday with the road manager for the NJTP plazas. Unfortunately F'real is getting their test market location like we were afraid of. The manager is excited to see that we are working on it but will obviously not miss sales in the near term if F'real pans out as a success. This reiterates our excitement for the program and the urgency to get it moving" (Williams DX19). On January 4-5, 2011, the launch meeting at Hamilton Beach's headquarters proceeded as planned between high level Hershey and Hamilton Beach executives (Wood DX9). In Hershey's handwritten notes from the meeting, the joint venture was referred to as the "f'Real Product Development" (Williams DX14; Waite DX 8).

64. On February 1, 2011, Hamilton Beach's marketing representative, Mr. Brian O'Flynn, began the process to obtain formal management approval for Hamilton Beach's joint venture with Hershey (Williams DX8, HBBF13112-13118). In the "HBB Business Case Summary" Mr. O'Flynn prepared for senior Hamilton Beach management, Mr. O'Flynn first described the problems associated with traditional milkshake preparation, including "labor and cleanability constraints." *Id.* Despite the attractiveness of "very high margin" on milkshakes, Mr. O'Flynn noted that "typically a large amount of real estate is need for a freezer, the ice cream needs to be hand scooped (so it is very labor intensive), often a large amount of ice cream is lost due to it icing over in the freezer, and sanitation is problematic since it depends on the quality of the operator." *Id.* Mr. O'Flynn then acknowledged f'real's pioneering work in overcoming those problems: "f'REAL was the first company in the US to offer a solution to these problems with their automated equipment and prepackaged shakes." *Id.* Mr. O'Flynn then summarized Hamilton Beach's discussions with Hershey to go into direct, head-to-head

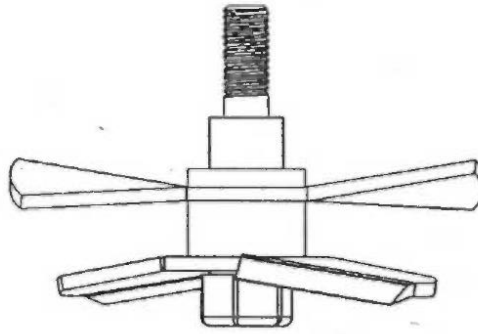
competition with Freal for Freal's customer base of colleges, universities, toll plazas, independent ice cream stores, and convenience stores. *Id.*

65. According to Mr. O'Flynn's HBB Business Case Summary, the stand alone blender Hamilton Beach was planning to build for Hershey would "use the Cornelius [IMI2000] blender module, use the cladding and controls from Stand Alone Blend in Cup (for Costa Coffee) but add the following features so it fits the needs of Hershey's: (1) the machine will need a new agitator design so that it can mix frozen ice cream (with added water) to deliver a perfectly mixed shake every time; (2) the machine needs to automatically deliver 2-3 oz. of water to each cup before it is blended. This allows the frozen ice cream to have a longer shelf life and improved flavor (increased water content forms ice crystals within the ice cream otherwise during storage); (3) The machine needs to sense that the cup has been removed (once the shake is mixed) so it knows to clean itself before the next mix cycle; (4) the machine needs a method of preventing the cup from rotating during the mix cycle. This is not required when blending iced drinks; (5) the machine needs to have a different (simplified) user interface so it can be easily understood by a consumer" (Williams DX8; see also, Williams pp. 17, 112-114; Branson, pp. 14-16, 73-74).

66. The blender Hamilton Beach developed for Hershey, which Hamilton Beach designated as the MIC2000 blender, is pictured in Mr. O'Flynn's "HBB Business Case Summary" (Williams DX8, HBB13116; Williams DX10):



67. The internal configuration of the MIC2000 blender is illustrated in the “SmartServe Operation Manual” and the “Product Definition Spec MIC2000/MIC2000CE” (Williams DX10; Branson DX24; Branson, pp. 35-36, 97-98). According to Hamilton Beach engineer Ben Branson, the MIC2000 blade/agitator was designed to combine the attributes of a “post hole digger” and a “boat propeller” (Branson, pp. 34-36; Williams DX10, HBBF25; Williams DX40, HBBF441):



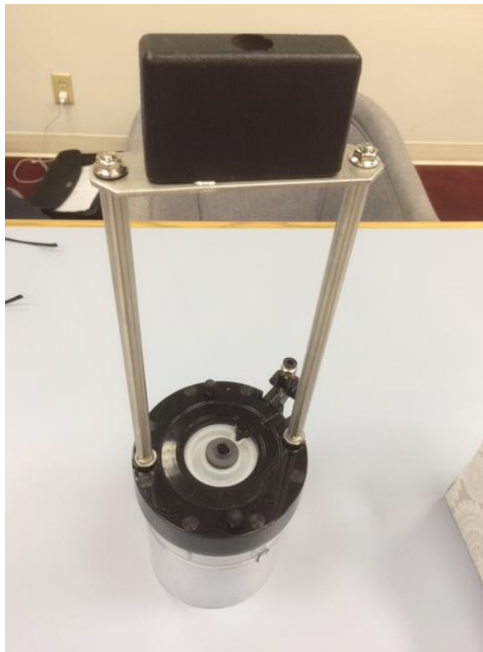
68. According to Mr. Branson, the lower MIC2000 blade, which is the “post hole digger,” has a depressed, “sharpened edge” designed to be able to “shave” through frozen Hershey milkshake mix-ins, such as chocolate chips (Branson, pp. 53-54; Pryor, pp. 68-72). The upper MIC2000 blade, which is the “boat propeller,” is “curved in multiple planes” so that it can create turbulence and get the frozen milkshake flowing within the cup (Branson, pp. 35-36; Pryor, pp. 68-70). The “boat propeller” design of the upper blade creates a high velocity flow turbulence resulting in air bubbles when the turbulence hits the top surface of the milkshake (Branson, pp. 44-47).

69. Because the MIC2000 de-aerates the Hershey milkshake during the blending process, one of the purposes of adding water to the mixture is to help restore some of the lost volume (Branson, pp. 38-39). Other objectives achieved by having the MIC2000 add water to the Hershey milkshake during blending include promoting product flow and reducing shipping costs (Branson, pp. 14-16; Williams, pp. 92-97; Pryor, p. 54; Williams DX8, HBBF13114).

70. The MIC2000 includes an infrared cup sensor to tell the MIC2000 microprocessor whether a cup is present in the mixing chamber (Williams DX10; Williams, pp. 92-97; Pryor, pp. 93-98). Through use of a cup sensor, the MIC2000 microprocessor can make sure the blended

Hershey cup is removed before the rinse cycle begins (Williams, pp. 92-97). Similarly, the cup sensor is used in conjunction with the consumer pressing the MIC2000 “START” button to alert the MIC2000 microprocessor that the blending process can safely begin (Pryor, pp. 93-98).

71. To retain the Hershey cup in the MIC2000 cupholder, Hamilton Beach places a heavy cast iron guide rod weight on top of its splash shield (Williams DX13; Pryor, pp. 50-54; Williams, pp. 120-124, 148-150). This heavy guide rod weight pushes down on the cup and thereby holds the cup more firmly in the cupholder. *Id.* “The weight of the lid assembly (as well as the detail of the cup holder) prevents the cup from rotating” (Raring DX9, HCC26762):



72. The weighted splash shield in the MIC2000 was designed by Hamilton to freely move up and down (Branson, p.110; Williams, pp. 127-130). “The design for that has always been for it to fall under its own weight” *Id.* There are no springs on top of the MIC2000 splash shield to bias the splash shield downward or motorized gear assembly to block the weighted

splash shield of the MIC2000 from being pushed upward (Branson, pp. 80-82; Sandford, pp. 150-151).

73. The simplified user interfaces on the MIC2000 are illustrated in the “SmartServe Operation Manual” that Hamilton Beach provides to all its MIC2000 customers (Williams DX10, HBBF28; Branson, p. 50; Williams, pp. 46-49; Branson, pp. 102-104). According to the “SmartServe Operation Manual,” the user is directed to place the Hershey cup in the cup holder, close the door and press the “START” button. *Id.* The MIC2000 splash shield then lowers and the MIC2000 begins to blend the Hershey milkshake. *Id.* Typically, the Hamilton Beach MIC2000 mixing blade will pass through the Hershey milkshake five times. *Id.* When mixing is finished, the MIC2000 splash shield raises back up and the MIC2000 displays shows “BLEND COMPLETE – PLEASE RINSE.” *Id.* The user then removes the cup and closes the door. *Id.* The MIC2000 will then automatically lower the splash shield into the door assembly and automatically start the rinsing cycle for a predetermined time period. *Id.* After the rinsing is complete, the splash shield is automatically raised and the MIC2000 display shows “RINSE COMPLETE.” *Id.*

74. The MIC2000 microprocessor controls operation of the MIC2000 (Williams, pp. 202-206; Branson, pp. 102-104). Among other things, the MIC2000 microprocessor: (1) controls movement of the splash shield up and down through operation of the carriage motor, (2) opens and closes the rinse nozzle valves; (3) operates the mixing blades and (4) receives inputs from the cup sensor and “START” button to begin operation of the mixing operation. *Id.*

75. Through the end of 2017, Hamilton Beach reported sales of 1,382 MIC2000 blenders to Hershey and generated \$4,768,937 in revenue from those sales (HBBF0172454; HBBF0172454). Hershey provided Hamilton Beach MIC2000 blenders to its retail customers

for use in Hershey's "Shake Shop Express" program. Hershey then sold frozen "Shake Shop Express" milkshakes and smoothies to its retail customers for use with the MIC2000 blenders (O'Flynn DX5):



76. Hamilton Beach and Hershey have demonstrated operation of the MIC2000 to customers and prospective customers on many occasions (Blackmon DX2; Williams, pp. 154-156; Branson, pp. 99-102). The customers and prospective customers have included Wawa, Sheetz, BOBs, Family Mart, Statiol, Jack & Jill Ice Cream, Nelson's Ice Cream and Freshen's (Blackmon DX2). Mr. Williams also performed MIC2000 demonstrations at Hamilton Beach's headquarters and, with Hershey, at numerous trade shows, including the National Restaurant Association trade show (Williams, pp. 154-156; Hershey's Response to f'real's Interrogatory No. 13). Mr. Branson performed MIC2000 demonstrations for Taco Bell and a college in Pennsylvania (Branson, pp. 99-102). Hamilton Beach and Hershey have also posted videos on the internet demonstrating use of the MIC2000 blender for the Shake Shop Express program.

Hershey also provides a demonstration and operating instructions to its retail customers when a MIC2000 is installed at their stores. In these demonstrations, Hamilton Beach and Hershey performed all the method steps set forth in claim 21 of the ‘662 patent (Williams, pp. 154-156; Branson, pp. 99-102; O’Flynn, pp. 162-176; Williams DX10).

77 Hershey became aware of f’real’s patents-in-suit and the possibility that they may be infringing f’real’s patents-in-suit no later than July, 2011 (Raring DX 8, 10). On June 6, 2011, Hershey’s attorney wrote to Hamilton Beach’s attorney expressing concern about whether its proposed use of Hamilton Beach’s MIC2000 blender might infringe f’real’s ‘377 patent, among other f’real patents (Raring DX8). On July 5, 2011, Hershey’s attorney wrote to Hamilton Beach’s attorney requesting assurances that Hershey’s proposed use of Hamilton Beach’s MIC2000 blender would not infringe f’real’s ‘150, ‘658 and/or ‘662 patents (Raring DX10). While Hamilton Beach responded that it had a license from f’real for f’real’s ‘150, ‘658 and ‘662 patents, Hamilton Beach refused to provide Hershey’s attorney with a copy of the f’real license. *Id.* On July 6, 2011, Hershey’s attorney again wrote to Hamilton Beach and indicated that “Hershey Creamery does not wish to have its source of blenders cut off because of termination or expiration of the f’real/Hamilton Beach license” (Raring DX11). Nonetheless, in the same e-mail, Hershey indicated that it would stop pressing its infringement concerns with Hamilton Beach if Hamilton Beach would provide Hershey with an indemnity. *Id.* On August 2, 2011, Hamilton Beach terminated its patent license with f’real (Wood DX12, HBBF685).

C. Hamilton Beach BIC2000 Blender

78. The BIC2000 is a stand alone companion to the MIC2000 blender (Williams DX6). Instead of mixing pre-filled milkshakes, the BIC2000 blender blends flavored ice drinks. *Id.* In the HBB Business Case Summary for the BIC2000, it states that: “HBB has committed to

tooling for the Cornelius Blend in Cup module to go after Taco Bell and other large chain business. The product dispenses ice and liquid ingredients into a disposable cup. The ingredients are then blended in our [IMI2000] blender modules. The target price for this machine is \$12,500. There are smoothie customers who either cannot afford the high capital investment, or will not have room to fit the large Cornelius machine. We envision these customers using existing ice machines to manually add ice to a disposable cup, and either manually adding liquid ingredients or using something like a Cornelius ‘Flavor Tower’ liquid dispenser. They would then take the cup of ingredients and blend in our stand alone blender module” (Williams DX 6, HBBF13038-13039).

79. As shown in the “SmartServe Operation Manual” and the BIC2000 HBB Business Case Summary, the MIC2000 and BIC2000 look identical from the outside (Williams DX10; Williams DX6). As shown in “Product Definition Spec BIC2000/BIC2000CE,” the internal configuration of the BIC2000 is nearly identical to the MIC2000 (Branson, DX23-24). The primary difference between the MIC2000 and BIC2000 are: (1) they have different blade sets; (2) the MIC2000 adds water but the BIC2000 does not; (3) the cupholder and (4) the user interface (Williams, pp. 63-64; Branson, pp. 73-74). While the upper blade on the MIC2000 is curved and wave-like, the upper blade on the BIC2000 is relatively flat (Williams DX10, HBBF25).

80. Through the end of 2017, Hamilton Beach sold 9 BIC2000 blenders and generated \$27,341 in revenue from those sales (Williams DX44). Hamilton Beach has demonstrated operation of the BIC2000 to customers and prospective customers on many occasions (Blackmon DX2). These customers and prospective customers have included Del Taco, Sonic, Krispy Kreme, Quiznos, Taco Bell, Wawa, KFC, Arby’s, Coca-Cola, Pepsico,

Starbucks, Yogurtland, Dairy Queen, Braums, RaceTrac, Chick-fil-A, Biscuitville, MAPCO, Boeddie Noelle, Hardees, Orange Leaf, Costa and Dunkin' Donuts (Blackmon DX2). In these demonstrations, Hamilton Beach performed all the method steps set forth in claim 21 of the '662 patent (Williams, pp. 154-156).

D. Hamilton Beach BIC3000-DQ Blender

81. Recently, Hamilton Beach made minor modifications to the MIC2000/BIC2000 blender design to create an automated blender that could be used to blend Dairy Queen “Blizzard” shakes (Wood DX23). Hamilton Beach designates this blender as the BIC3000-DQ (Blackmon DX11). As discussed in the HBB Business Case Summary for the Dairy Queen Hands Free Machine, most Dairy Queen franchisees currently use a manual \$700 mixer for blending their “Blizzard” shakes (Wood DX23; Williams, pp. 64-68; O’Flynn, pp. 162-176). Hamilton Beach intends to sell Dairy Queen franchisees a modified version of the MIC2000 which can automatically prepare the “Blizzard” shakes and then automatically clean itself. *Id.* “A huge challenge was accommodating the large range of cup sizes – being able to grip the cups effectively & mix well throughout the length of the cups with the various recipes. This was achieved by tilting the cup, having the cup rotating during the mix operation, and an innovative grip style cup holder. The design has been extensively tested in [Hamilton Beach’s] kitchen, by the DQ corporate office, and there are currently five prototypes on test in stores within the US and Canada.” *Id.* An advertisement picture of the BIC3000-DQ is shown below (Blackmon DX11, FREAL5877):



82. The differences between MIC2000 and the BIC3000DQ are: (1) the BIC3000-DQ is slightly taller to accommodate a taller cup; (2) the splash shield is shaped more like a hemisphere; (3) the cup holder is tilted at an angle; (4) an agitator blade is used; (5) the user interface is different; and (6) an auxiliary fan is added (Williams, pp. 31-32; GM44 Request for Quotation, HBBF14772-14782; GM44 Product Disclosure, HBBF14976-14980; BIC3000-DQ Daily Cleaning Instructions).

83. By June 2018, Hamilton Beach reported selling 77 BIC3000-DQ blenders to Dairy Queen's distributor, Wasserstrom, and generated \$385,000 in revenue from those sales (Stanford, p. 97).

84. Significantly, all of the accused Hamilton Beach blenders, the IMI2000, MIC2000, BIC2000 and BIC3000-DQ, use the same automated approach to splash shield rinsing disclosed and claimed in f'real's self-rinsing blender patents (O'Flynn, pp. 162-176; Sandford, pp. 149-150; Williams, pp.154-156; Branson, pp. 99-102; Williams DX10). In all the accused blenders, the mixing process begins by the consumer, or demonstrator in the case of the

Hamilton Beach/Hershey demonstrations, placing a cup with material to be mixed in the cup holder of the accused Hamilton Beach blender. *Id.* In each of the accused blenders, there is a splash shield positionable to shield the top opening of the cup, a rotatable mixing element extendable into the cup to mix the material in the cup and at least one nozzle pointed toward the splash shield. *Id.* After the material in the cup is mixed using the rotatable mixing element and with the splash shield shielding the cup, the splash shield is lifted so that the consumer or demonstrator can remove the blended drink. *Id.* With the drink removed, the accused Hamilton Beach blenders direct rinsing fluid onto the splash shield using the prepositioned nozzles pointed at the splash shield. *Id.*

VI. Infringement Analysis

A. U.S. Patent No. 7,520,662

85. Asserted claim 21 of the '662 patent is directed to a method for rinsing a splash shield. This method includes the steps of placing a vessel with material to be mixed in the cup holder of a mixing machine, using a splash shield to cover the opening of the cup and pointing at least one pre-positioned rinse nozzle toward the splash shield. After the material is mixed in the cup with the splash shield on top, the splash shield is removed from the cup, the cup is removed from the rinsing zone and rinse fluid is then directed onto the splash shield using the pre-positioned rinse nozzle pointed toward the splash shield.

86. I conclude that both Hamilton Beach and Hershey have infringed claim 21 of the '662 patent both directly, by inducing infringement, and by contributorily infringing. When Hamilton Beach and Hershey made their many demonstrations of the MIC2000, IMI2000, BIC2000 and BIC3000-DQ to customers and prospective customers, they directly infringed claim 21 of the '662 patent. Hamilton Beach's engineers Brian Williams and Ben Branson as

well as Hamilton Beach's marketing representative Brian O'Flynn admitted at their depositions that they performed each step set forth in claim 21 of the '662 patent during each of those demonstrations (Williams, pp. 154-156; Branson, pp. 99-102; O'Flynn, pp. 162-176). For Hershey, direct infringement of claim 21 of the '662 patent can be seen in the Shake Shop Express videos which Hershey posted on YouTube.

87. Hamilton Beach and Hershey contributorily infringed and induced infringement of claim 21 of the '662 patent by consumers for Hershey's milkshakes each time the consumer prepares a Hershey "Shake Shop Express" milkshake. Both Hamilton Beach and Hershey encouraged and instructed "Shake Shop Express" consumers to practice the method steps of claim 21 of f'real's '662 patent. Hamilton Beach provided encouragement and instruction by, among other things, providing a step-by-step guide to infringement in its Operation Manual for the MIC2000 and user interface instructions on the MIC2000 display screen (Williams DX10). For the IMI2000, Hamilton Beach provided Cornelius with IMI2000 modules and instructions to use those modules for the Cornelius drink machines. Similarly, for the BIC2000 and BIC3000-DQ, Hamilton Beach provided specialized blenders and instructions on how to use the specialized blenders. Instructions showing how to use the BIC3000-DQ can be found in internet videos posted by Hamilton Beach (see http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017). Hershey provided encouragement and instruction for infringement of claim 21 of the '662 patent by posting its "Shake Shop Express" videos on YouTube and providing user instructions at its "Shake Shop Express" display kiosks. Hershey also trained its retailers to assist "Shake Shop Express" consumers to perform the steps of claim 21 of the '662 patent.

88. Hamilton Beach and Hershey contributorily infringed claim 21 of the ‘662 patent by selling and leasing self-rinsing blenders, including the IMI2000, MIC2000, BIC2000 and BIC3000-DQ, that are specifically designed to practice the method of claim 21 of the ‘662 patent. These blenders are not typical household blenders. Instead, they are commercial products specifically designed to practice the self-rinsing blender inventions disclosed and claimed in f’real’s self-rinsing blender patents. For that reason, the accused Hamilton Beach blenders do not have a substantial non-infringing use for purposes of contributory infringement.

89. No later than July, 2011, both Hamilton Beach and Hershey knew of f’real’s patents-in-suit and knew that their “Shake Shop Express” joint venture raised infringement concerns (see Raring DX8,10). With strong prodding from Cornelius, Hamilton Beach was concerned enough about the infringement issues that it negotiated a limited license from f’real in May 2010 for f’real’s self-rinsing blender patents (Williams DX36; Wood DX3,21). Hamilton Beach recognized the need to license f’real’s self-rinsing blender patents in the “HBB Business Case Summary” for the IMI2000, noting: “[t]he method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f’REAL (who have IP in this area that we intend using) and HBB. ... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)” (UNREDACTED “HBB Business Case Summary”, HBBF171458). Nonetheless, barely a year after entering into that patent license, Hamilton Beach terminated that license (Wood DX12). By relying on indemnification from Hamilton Beach, Hershey accepted the risk that the MIC2000 may infringe the previously licensed f’real patents (Raring DX11). Thus, despite the acknowledged need for a license from

f'real, both Hamilton Beach and Hershey knew their actions were infringing f'real's patent rights but proceeded anyway with developing and marketing the infringing MIC2000. *Id.*

90. By preparing Hershey milkshakes in the manner taught by Hamilton Beach and Hershey, the "Shake Shop Express" consumers are performing every step of claim 21 of the '662 patent and, thus, directly infringing claim 21 of the '662 patent. Similarly, users of Hamilton Beach's IMI2000, BIC2000 and BIC3000-DQ blenders are performing every step of claim 21 of the '662 patent and, thus, directly infringing claim 21 of the '662 patent.

91. Presented below is a claim chart addressing direct, induced and contributory infringement of every element of claim 21 of the '662 patent by the accused products:

U.S. Patent No. 7,520,662	Comments
21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machine blenders automatically perform a method for rinsing a splash shield after the inserted drink is blended and removed (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, "Auto-Rinse"; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 156-160; BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
providing a vessel containing material to be mixed, the vessel including an opening:	The cup (vessel) has a drink inside and includes a top opening (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 156-160)
further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders have a cup holder for receiving the cup, a rotatable mixing blade extendable into the cup for mixing the drink,

U.S. Patent No. 7,520,662	Comments
splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield:	a splash shield positionable to shield the top opening of the cup, and rinse nozzles oriented to spray rinse water towards inside surfaces of the splash shield (Shake Shop Express and BIC3000-DQ videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64,156-160; Branson DX23-25)
After mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.	After the MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders mix the drink in the cup while the splash shield lid is shielding the cup opening, the splash shield lid is lifted from the cup opening (unshielding) to allow the cup to be removed and then the blender automatically directs rinsing fluid onto inside surfaces of the splash shield using rinse nozzles. Since the cup is removed before the automatic rinsing, the cup is isolated from the rinsing fluid during the rinsing step (Shake Shop Express and BIC3000-DQ videos; HBBF28; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64,156-160; Branson, pp. 99-102; O'Flynn, pp. 162-170).

92. While it is my opinion that claim 21 of the '662 patent is being literally infringed by both Hamilton Beach and Hershey, I also believe that each element of claim 21 of the '662 patent is being infringed by Hamilton Beach and Hershey under the doctrine of equivalents because, to the extent literal infringement cannot be shown, each element of each step performed by them and their consumers has substantially the same function, is performed in substantially the same way and achieves substantially the same result as the literal elements of the claim.

B. U.S. Patent No. 7,520,658

93. Asserted claims 1, 5 and 6-11 of the '658 patent are directed to a mixing machine capable of self-rinsing operation and a method of using that mixing machine. As shown in claim 1 of the '658 patent, the mixing machine has a holder proportioned to receive a cup with material to be mixed, a rotatable mixing element with a shaft extendable into the cup, a motor that can either move the cup up or the rotatable mixing element down for mixing and a splash shield slidable on the rotatable mixing element shaft to cover the top opening of the cup during mixing. The splash shield in the '658 patent has sufficient mass to retain the cup in the cup holder during mixing and, during mixing, is unrestrained by mechanical forces in its ability to slide upward on the rotatable mixing element shaft. As shown in claim 6 of the '658 patent, the method is essentially using the mixing machine of claim 1 to mix the contents of the cup.

94. I conclude that both Hamilton Beach and Hershey have directly infringed apparatus claims 1 and 5 of the '658 patent by making, using, selling and/or leasing the MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machines. I further conclude that Hamilton Beach and Hershey have directly infringed method claims 6-11 of the '658 patent and indirectly infringed those same claims by inducing infringement and by contributorily infringing. By manufacturing, selling and using the MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machines, Hamilton Beach directly infringed claims 1 and 5 of the '658 patent. By providing the MIC2000 mixing machines to retail stores, such as convenience stores, after purchasing the MIC2000 mixing machines from Hamilton Beach, Hershey directly infringed apparatus claims 1 and 5 of the '658 patent. When Hamilton Beach and Hershey made their many demonstrations of the MIC2000, IMI2000, BIC2000 and BIC3000-DQ to customers and prospective customers, they directly infringed method claims 6-11 of the '658 patent. For Hershey, direct infringement

of claims 6-11 of the '658 patent can be seen in the Shake Shop Express videos which Hershey posted on YouTube.

95. Hamilton Beach and Hershey also induced the consumers of Hershey's milkshakes to infringe method claims 6-11 of the '658 patent and contributorily infringed each time the consumer prepares a Hershey "Shake Shop Express" milkshake. Both Hamilton Beach and Hershey encouraged and instructed "Shake Shop Express" consumers to practice the method steps of claims 6-11 of Hershey's '658 patent. Hamilton Beach provided encouragement and instruction by, among other things, providing a step-by-step guide to infringement in its Operation Manual for the MIC2000 and user interface instructions on the MIC2000 display screen (Williams DX10). For the IMI2000, Hamilton Beach provided Cornelius with IMI2000 modules and instructions to use those modules for the Cornelius drink machines. Similarly, for the BIC2000 and BIC3000-DQ, Hamilton Beach provided the specialized blenders and instructions on how to use the specialized blenders. Instructions showing how to use the BIC3000-DQ blenders can be found in internet videos posted by Hamilton Beach (see http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017). Hershey provided encouragement and instruction for infringement of claims 6-11 of the '658 patent by posting its "Shake Shop Express" videos on YouTube and providing user instructions at its "Shake Shop Express" display kiosks. Hershey also trained its retailers to assist "Shake Shop Express" consumers to perform the method steps of claim 6-11 of the '658 patent.

96. Hamilton Beach and Hershey contributorily infringed method claims 6-11 of the '658 patent by selling and leasing self-rinsing blenders, including the IMI-2000, MIC-2000, BIC2000 and BIC3000-DQ, that are specifically designed to practice the method of claims 6-11

of the '658 patent. These blenders are not typical household blenders. Instead, they are commercial products specifically made to practice the self-rinsing blender inventions disclosed and claimed in f'real's self-rinsing blender patents. For that reason, the accused Hamilton Beach blenders do not have a substantial non-infringing use.

97. No later than July 2011, both Hamilton Beach and Hershey knew of f'real's patents-in-suit and knew that their "Shake Shop Express" joint venture raised infringement concerns (see Raring DX8,10). With strong prodding from Cornelius, Hamilton Beach was concerned enough about the infringement issues that it negotiated a limited license from f'real in May, 2010 for f'real's self-rinsing blender patents (Williams DX36; Wood DX3,21). Hamilton Beach recognized the need to license f'real's self-rinsing blender patents in the "HBB Business Case Summary" for the IMI2000, noting: "[t]he method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f'REAL (who have IP in this area that we intend using) and HBB... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)" (UNREDACTED "HBB Business Case Summary", HBBF171458). Nonetheless, barely a year after entering into that patent license, Hamilton Beach terminated that license (Wood DX12). By relying on indemnification from Hamilton Beach, Hershey accepted the risk that the MIC2000 may infringe the previously licensed f'real patents (Raring DX11). Thus, despite the acknowledged need for a license from f'real, both Hamilton Beach and Hershey knew their actions were infringing f'real's patent rights but proceeded anyway with developing and marketing the infringing MIC2000. *Id.*

98. By preparing Hershey milkshakes in the manner taught by Hamilton Beach and Hershey, the "Shake Shop Express" consumers are performing every step of claims 6-11 of the

‘658 patent and, thus, directly infringing claims 6-11 of the ‘658 patent. Similarly, consumers for Hamilton Beach’s IMI2000, BIC2000 and BIC3000-DQ blenders are performing every step of claims 6-11 of the ‘658 patent and, thus, directly infringing claims 6-11 of the ‘658 patent.

99. The MIC2000, IMI2000, BIC2000 and BIC3000-DQ blenders have a splash shield of “sufficient mass to retain the vessel within the holder” during blending and are “unrestrained against sliding movement on the shaft in a direction away from the opening” within the meaning of the asserted ‘658 patent claims. The “sufficient mass” and “unrestrained against” limitations were inserted into the ‘658 patent claims to distinguish the prior art mechanical approaches of using springs or a mechanized gear assembly to hold the splash shield down against the cup in a way that would retain the cup in the cupholder during mixing (see ‘658 patent, 3:65-4:3). Unlike the prior art mechanical approaches, the ‘658 patent’s solution of a weighted splash shield allows nearly constant pressure to be applied to the top of the cup during mixing while allowing relatively free movement of the splash shield during the blending process. The prior art spring and mechanized gear assembly approaches, by contrast, would apply inconsistent pressure to the top of a vertically moving cup. Significantly, Hamilton Beach rejected both of the prior art mechanical approaches of using springs or a mechanized gear assembly when they designed their splash shield assemblies for the MIC2000, IMI2000, BIC2000 and BIC3000-DQ. Instead, Hamilton Beach copied f’real’s patented approach of using a weighted splash shield mounted on the rotatable mixing spindle shaft. The success of using f’real’s weighted splash shield approach “prevent[ed] the cup from rotating during the mix cycle” (see Williams DX8, HBBF12114).

100. It makes no functional difference that Hamilton Beach creates its weighted splash shield by placing a heavy cast iron weight on top of the plastic portion of its splash shield rather

than making the entire splash shield of heavier materials as f'real does. Both approaches create a splash shield of "sufficient mass" within the meaning of the '658 claims and, thus, are functionally the same. Further, the fact that Hamilton Beach's weighted splash shield works in cooperation with Hamilton Beach's cup holder does not avoid infringement. Both the specification and claims of the '658 patent recite a weighted splash shield working in conjunction with a cup holder. Although there theoretically could be minor friction on the guide rods holding Hamilton Beach's cast iron weight that may inhibit "unrestrained" upward movement of Hamilton Beach's splash shield during mixing, Hamilton Beach's engineers freely acknowledge that the purpose of the splash shield design "has always been for it to fall under its own weight" (Branson, p. 110; Williams, pp. 127-130). To accomplish that objective, Hamilton Beach uses "lubricious" materials for the seals and bushings coming in contact with Hamilton Beach's spindle and guide rods. *Id.* It is also possible that there could be friction between f'real's rotatable spindle and f'real's weighted splash shield that could inhibit the "unrestrained" upward movement of f'real's weighted splash shield. Nonetheless, these incidental frictional contacts are not the type of "mechanical means" (e.g., springs, gear assemblies) to hold down the splash shield that the weighted f'real splash shield was designed to avoid. Within the context of the '658 patent disclosure and the real world, Hamilton Beach has plainly appropriated f'real's invention of a splash shield having "sufficient mass" that is "unrestrained" as it moves upward during the mixing process.

101. Presented below is a chart detailing how both Hamilton Beach and Hershey have directly infringed, induced infringement, and contributed to the infringement of every element of claims 1, 5 and 6-11 of the '658 patent:

U.S. Patent No. 7,520,658	Comments
1. A mixing machine for mixing a liquid in a vessel having an opening, the mixing machine comprising:	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machine blenders mix a liquid drink contained in a cup (vessel) with a top opening (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29 “Water Scale”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25; BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
a holder coupled to the mixing machine, the holder proportioned to receive a vessel;	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a cup holder proportioned to receive a cup (Shake Shop Express and MIC/BIC3000-D videos; HBBF 25 “Cup Holder”, HBBF43; physical inspection of MIC2000; Williams pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a rotatable blending/mixing blade element that is extendable through the top opening of the cup positioned in the cup holder for mixing the drink contents contained in the cup (Shake Shop Express and BIC3000-DQ videos; HBBF322, HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a carriage stepper motor operatively coupled to the mixing blade to effect axial translation of the mixing

U.S. Patent No. 7,520,658	Comments
positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;	blade from a first (in this case lower) mixing position to a second (in this case higher) mixing position, the mixing blade being positioned further from the cup opening when in the first (lower) mixing position than in the second (higher) mixing position (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a shaft; and	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a mixing shaft between the mixing motor and mixing blade element (physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a splash shield slidable on the mixing shaft (through an aperture in the splash shield lid) between a first (in this case higher) splash shield position and a second (in this case lower) splash shield position, the splash shield in the second (lower) position positionable with its splash shield lid covering the cup opening and being unrestrained against a sliding movement on the mixing shaft in a direction away from the cup opening, the splash shield having sufficient mass (when its lid covers the cup opening), in part by virtue of its heavy cast iron guide rod weight, to retain the cup within the cup holder during relative axial movement of the mixing blade and the cup from the first (higher) shield position to the second (lower) shield position when liquid is present in the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25).

U.S. Patent No. 7,520,658	Comments
5. The mixing machine of claim 1, wherein the splash shield has a mass of approximately 5 lbs.	The Hamilton Beach MIC2000 splash shield assembly was measured to weigh 3.74 lbs. It is believed the BIC2000, BIC3000-DQ and IMI2000 splash shields have a comparable weight (physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
6. A method for retaining a vessel in a holder while mixing the contents of the vessel, the method comprising the steps of:	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machine blenders each retain a cup in a cup holder while mixing the contents of the cup (Shake Shop Express and BIC3000-DQ videos; HBBF 25 “Cup Holder”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
providing a vessel containing contents to be mixed, the vessel including an opening;	The cup (vessel) has contents to be mixed inside and includes a top opening (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
further providing a mixing machine having a holder on the mixing machine for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, and a shield;	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a cup holder for receiving the cup, a rotatable mixing blade extendable into the cup for mixing the cup contents and a splash shield to shield the top opening of the cup (Shake Shop Express and BIC3000-DQ videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
positioning the vessel in the holder;	After selecting a cup with contents to be mixed, the user places the cup in the MIC2000, BIC2000, BIC3000-DQ or IMI2000 cupholder (Shake Shop Express and BIC3000-DQ videos; HBBF 25 “Cup Holder”; physical inspection of MIC2000; Williams pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
positioning the shield in contact with the	After the user presses the START button, the

U.S. Patent No. 7,520,658	Comments
vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening; and	Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blender positions its splash shield in contact with the top of the cup to cover its top opening, the splash shield is slidable on the mixing shaft (through an aperture in the splash shield lid) in a way that is unrestrained against an upward movement on the mixing shaft in a direction away from the cup opening (Shake Shop Express and BIC3000-DQ videos; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25).
with the vessel positioned in the holder, using a motor to translate at least one of the mixing element and the holder such that the mixing element passes through the contents of the vessel, the mass of the splash shield preventing separation of the holder and the vessel during translation.	With the cup positioned in the cup-receiving holder, the MIC2000, BIC2000, BIC3000-DQ and IMI2000 carriage stepper motor axially translates the mixing blade up and down such that the mixing blade passes through the contents of the cup while the mass of the splash shield prevents separation of the cup from the cup-receiving holder during translation. A cast iron guide rod weight is placed on top of the upper stop plate of the splash shield assembly to better insure there is no separation of the cup from the cup-receiving holder during translation and blending (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
7. The method of claim 6, wherein the method further includes the step of rotating the mixing element to mix the contents of the vessel	The MIC2000, BIC2000, BIC3000-DQ and IMI2000 each use their mixing motor to rotate the mixing blade to mix the contents in the cup (Shake Shop Express videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
8. The method of claim 7 wherein translating the mixing element includes translating the mixing element while	The MIC 2000, BIC2000, BIC3000-DQ and IMI2000 carriage stepper motors each translate the mixing blade up and down while the mixing blade is

U.S. Patent No. 7,520,658	Comments
rotating the mixing element to mix the contents of the vessel.	mixing the contents of the cup (Shake Shop Express videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
9. The method of claim 6, wherein the method further includes containing a substantial portion of contents splashing from the vessel within the shield or vessel.	The MIC2000, BIC2000, BIC3000-DQ and IMI2000 splash shields prevent a substantial portion of the contents in the cup from splashing out during the blending/mixing process (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
10. The method of claim 6, wherein the contents of the vessel are at least partially frozen.	The contents of the cup are at least partially frozen. For the MIC2000 in the Shake Shop Express kiosks, frozen Hershey milkshakes are used. For the BIC3000-DQ, frozen ice cream is used. For the BIC2000 and IMI2000, ice is mixed with flavorings (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
11. The method of claim 6, wherein the contents comprise frozen milkshake ingredients.	The contents in the Hershey cups in the Shake Shop Express kiosks where the Hamilton Beach MIC2000 blenders are used comprise frozen milkshake ingredients. The ice cream used in the BIC3000-DQ is also a milkshake ingredient (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)

102. While it is my opinion that claims 1, 5 and 6-11 of the '658 patent are being literally infringed by both Hamilton Beach and Hershey, to the extent literal infringement cannot be shown, each element of claims 1, 5 and 6-11 of the '658 patent are being infringed by Hamilton Beach and Hershey under the doctrine of equivalents because the accused products, and each claim method performed by them and their consumers, has substantially the same

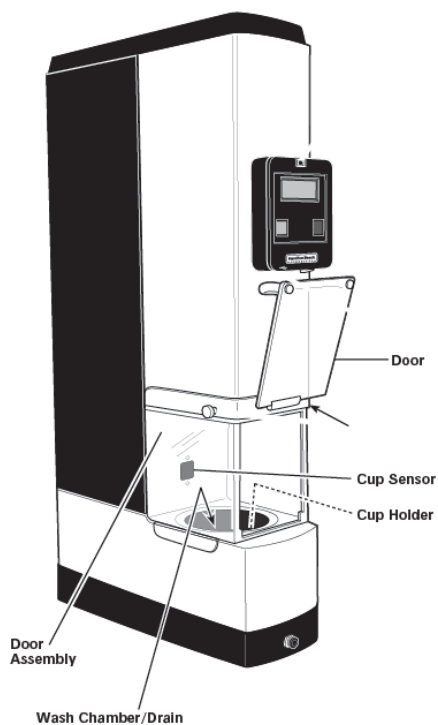
function, is performed in substantially the same way and achieves substantially the same result as the literal elements of the claims.

C. U.S. Patent No. 7,144,150

103. Asserted claims 15, 20 and 22 of the ‘150 patent are directed to a mixing machine capable of self-rinsing operation. As recited in independent claim 15 of the ‘150 patent, the mixing machine has a rotatable mixing element extendable into a cup for mixing the contents of the cup, a rinse chamber in the mixing machine having an entrance and a door covering the entrance, a splash shield positionable to cover the top opening of the cup and at least one nozzle coupled to a source of rinse fluid and positioned to direct rinse fluid onto the splash shield within the rinse chamber. Dependent claim 20 adds the limitation of having at least one nozzle oriented to direct rinse fluid onto the mixing element and dependent claim 22 adds the limitation of having a splash shield of sufficient mass to retain the vessel in the holding during mixing.

104. I conclude that both Hamilton Beach and Hershey have directly infringed claims 15, 20 and 22 of the ‘150 patent by making, using (e.g., demonstrating), selling and/or leasing the MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders.

105. The accused MIC2000, BIC2000, and BIC3000-DQ blenders have a “rinse chamber having an entrance and a door movable to a closed position covering the entrance.” For the MIC2000 and BIC2000 blenders, their “SmartServe Operation Manual” illustrates such a “rinse chamber” as being the combination of the “door assembly” and “door” (“SmartServe Operation Manual”, Williams DX10, HBBF25). When the door is raised as shown in the illustration below, an entrance for the cup can easily be seen. *Id.*



The door is then movable downward to a closed position to cover the entrance. As shown by the photograph below, a rinse manifold is positioned at the bottom of this rinse chamber where the “Wash Chamber/Drain” arrow is pointing in the “SmartServe Operation Manual” illustration shown above:



A similar rinse chamber arrangement can be seen in the BIC3000-DQ (Blackmon DX11; GM44 Request for Quotation, HBBF14772-14782; GM44 Product Disclosure, HBBF14976-14980; BIC3000-DQ Daily Cleaning Instructions).

106. The addition of a removable splash shield inside the “wash chamber” of the MIC2000, BIC2000, and BIC3000-DQ blenders does not negate such “wash chamber” being a “rinse chamber” within the meaning of the ‘150 patent claims. The Court construed “rinse chamber” in the ‘150 patent to mean simply “an enclosure in which a rinse apparatus is positioned to provide rinsing.” The combination of the door assembly, the door, and the rinse manifold in the MIC2000, BIC2000 and BIC3000-DQ blenders satisfies the “rinse chamber” claim limitations as defined by the Court. Additionally, “sufficient mass” of the splash shield within the meaning of claim 22 of the ‘150 patent has already been addressed in connection with my ‘658 patent discussion.

107. Presented below is a chart detailing how the accused products directly infringe every element of claims 15, 20 and 22 of the ‘150 patent:

U.S. Patent No. 7,144,150	Comments
15. On a mixing machine for mixing a liquid contained in a vessel having an opening,	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders each mix liquids in a cup (vessel) having an opening at its top (Shake Shop Express videos: https://www.youtube.com/watch?v=h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29 “Water Scale”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25; BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing the contents of the	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ each have a rotatable mixing blade element extendable into the cup for mixing the

U.S. Patent No. 7,144,150	Comments
vessel, the improvement comprising:	contents of the cup (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25; HBBF322, HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ blenders each have a door assembly rinse chamber where rinsing occurs, the door assembly rinse chamber having a front opening serving as an entrance for the cup and a pivotable door moveable to a closed position covering that entrance (Shake Shop Express and BIC3000-DQ videos; HBBF227 “Door Assembly”; physical inspection of MIC2000; Branson DX23-25; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders each carry a splash shield which is positionable so that its splash shield lid covers the top opening of the cup (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).
at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders each have multiple nozzles coupled, through a water hose opening at the back of the blender, to a source of rinse fluid. The nozzles are oriented to direct rinse fluid onto the splash shield within the door assembly rinse chamber (Shake Shop Express and MIC/BIC3000-DQ videos; Branson DX23-25; HBBF231 “Auto-Rinse”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
20. The improvement of claim 15, wherein at least one nozzle is oriented to direct rinse fluid onto the mixing element	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ nozzles apply rinsing fluid onto the mixing blade and the splash shield (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25;

U.S. Patent No. 7,144,150	Comments
	HBBF227, “Water Hose Opening”; HBBF231 “Auto-Rinse”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
22. The improvement of claim 15, wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions	The splash shield in the Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders are each of sufficient mass to retain the cup within the cupholder during relative movement of the mixing blade and cup in opposite directions. A cast iron guide rod weight is placed on top of the shield to insure there is no separation of the cup from the cup-receiving holder during blending (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).

108. While it is my opinion that claims 15, 20 and 22 of the ‘150 patent are literally infringed by the accused products, to the extent literal infringement is not shown, each element of claims 15, 20 and 22 of the ‘150 patent are being infringed under the doctrine of equivalents because each corresponding element of the accused products has substantially the same function, perform in substantially the same way and achieves substantially the same result as the corresponding elements of the claims.

D. U.S. Patent No. 5,803,377

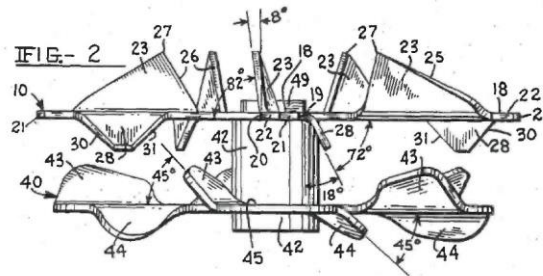
109. Asserted claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent are directed to a mixing machine capable of reconstituting a frozen drink, such as a milkshake or smoothie, to a desired texture. For a milkshake, the desired texture is typically a thick, creamy texture. In the broadest asserted claims of the ‘377 patent (e.g., independent claims 1 and 11), the mixing machine includes a housing, a cup support, a liquid dispenser, a rotatable blade assembly,

grinding means/shaving elements and aeration means. The asserted dependent claims of the ‘377 patent include features to detect the presence of a cup (e.g., claims 6, 9, 19 and 22), features of the grinding means/shaving elements, aeration elements or liquid dispenser (e.g., claims 2-3 and 13-14) and motorized movement of the carriage holding the blade assembly (e.g., claims 20-22).

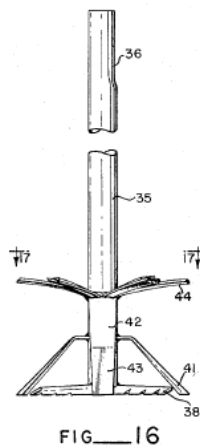
110. I conclude that both Hamilton Beach and Hershey have directly infringed claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent by making, using (e.g., demonstrating), selling and/or leasing the MIC2000 blenders.

111. The accused MIC2000 blenders have “grinding means/shaving elements” and “aeration means.” The Court construed “grinding means” as a “means-plus-function” term where the claimed function is “grinding the frozen substance to form a ground substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile.” Similarly, the Court defined “shaving elements” as a “means-plus-function” term where the claimed function is “shaving a frozen substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile.” The MIC2000 uses a blade assembly with two slim blades. According to its designer, Ben Branson, the lower MIC2000 blade is modeled after a “post hole digger” with a depressed “sharpened edge” designed to be able to “shave” through frozen Hershey milkshake and mix-ins, such as chocolate chips (Branson, pp. 53-54; Pryor, pp. 68-72). This lower MIC2000 blade is the “grinding means” and “shaving elements” set forth in the asserted ‘377 claims. With regard to whether they can be considered to have a “slim cross-sectional profile,” it is useful to consider the Stiffler and Tomlinson ‘997 prior art patents Hamilton Beach argued had “grinding means” and “shaving elements.” As illustrated below, the Stiffler patent shows blades with sharp bends

that protrude widely out of the plane where the blade is attached to the rotatable mixing element (Williams DX43):



Mr. Williams testified that using this type of sharply bent blade with a wider cross-sectional profile for the accused Hamilton Beach blenders is “not good engineering practice.” Similarly, as shown below, the Tomlinson ‘997 patent has a complicated assembly of multiple blades that assumes a wider cross-sectional profile.



Again, Hamilton Beach avoided the wider blade option of the prior art and adopted f'real's approach of using a blade with a thin cross-sectional profile.

112. Turning now to “aeration means,” the Court construed “aeration means” as a means-plus-function term where the claimed function is “causing air to be incorporated into a mixture” and the corresponding structure is “curved, wave-like structure(s) on a rotatable blade with a slim cross-sectional profile.” According to its designer, Ben Branson, the upper MIC2000

blade is modeled after a “boat propeller” in the sense it is “curved in multiple planes” (Branson, pp. 44-47). Mr. Branson testified that the Hamilton Beach MIC2000 blades (and added water) initially “de-aerate” the frozen Hershey milkshake (Branson, pp. 38-39). Mr. Branson also testified that his “boat propeller” design for the upper MIC2000 blade creates a high velocity flow turbulence resulting in air bubbles when the turbulence hits the top surface of the milkshake (Branson, pp. 44-47). Although Mr. Branson refused to acknowledge at his deposition that his “boat propeller” MIC2000 blade re-aerates the Hershey milkshake after de-aerating it, this is borne out by testing. To determine if the Hershey milkshake is being re-aerated by the “boat propeller” blade, f’real conducted scientific tests of the MIC2000 blender around the time I did my inspection of the MIC2000 blender. The results of these tests are attached as Exhibit B to this report. The tests were conducted in a scientifically-valid manner and their results make sense. For that reason, I am adopting the scientific aeration tests conducted by f’real as part of my expert report testimony. As shown by the aeration tests of attached Exhibit B, the Hamilton Beach “boat propeller” blade does re-aerate the Hershey milkshake within the meaning of the ‘377 patent claims. With regards to whether Mr. Branson’s upper “boat propeller” aeration blade can be considered to have a “slim cross-sectional profile,” I believe it has a slim cross-sectional profile for the reasons I just explained for Mr. Branson’s lower “grinding means/shaving elements” blade. I also believe that the two MIC2000 blades considered together have a “slim cross-sectional” profile.

113. Presented below is a chart detailing how the MIC2000 directly infringes every element of claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent:

U.S. Patent No. 5,803,377	Comments
1. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes frozen into a Hershey cup. Hershey's "frozen ice cream" milkshakes are stored before use in a freezer at between 2-3°F (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Branson Ex. 24; Williams DX8, Guzdar DX3; Hamilton Beach SmartServe Operation Manual, HBBF23-29; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to contain its motors and other blending components (Shake Shop Express videos; Branson Ex. 24; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 has a cup holder mounted to the housing (Shake Shop Express videos; Branson Ex. 24; HBBF25, "Cup Holder"; HBBF43; Williams Dep.; physical inspection of MIC2000)
a liquid dispenser having an outlet positioned to direct liquid into a cup positioned in the cup support;	The Hamilton Beach MIC2000 has a liquid dispenser with an outlet positioned to dispense water into a Hershey cup positioned in the cup holder (Shake Shop Express videos; HBBF29, "Water Scale"; Williams Dep.; physical inspection of MIC2000; Branson Ex. 24)
grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance; and	The Hamilton Beach MIC2000 has a lower mixing blade of slim cross-sectional profile with a sharp depressed edge for grinding the frozen Hershey milkshake to form a ground milkshake when the Hershey frozen milkshake cup is positioned in the cup holder (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
aeration means for, when a cup containing a frozen substance is	The Hamilton Beach MIC2000 has a mixing blade of slim cross-sectional profile with a curved, wave-like

U.S. Patent No. 5,803,377	Comments
positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser	shape for causing air to be incorporated into the mixture of the ground frozen milkshake and dispensed water when the Hershey milkshake cup is positioned in the cup holder (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
2. The apparatus of claim 1 wherein the grinding and aeration means comprise a rotatable blade assembly mounted within the housing for extension into a cup positioned in the cup support.	The Hamilton Beach MIC2000 mixing blades which perform the grinding and aeration functions are a rotatable blade assembly connected to the mixing motor within the MIC2000 housing for extension into a Hershey milkshake cup held in the MIC2000 cup holder (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
3. The apparatus of claim 2 wherein the blade assembly includes a blade member mounted on a shaft,	The Hamilton Beach MIC2000 has mixing blade assembly mounted on a shaft (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade member including first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade member in a fluid, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect.	The Hamilton Beach MIC2000 mixing blade assembly has regions which are spaced apart and on different planes such that, during rotation of the blade assembly, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
4. The apparatus of claim 2 wherein the blade assembly is moveable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom, and	Through use of a carriage stepper motor, the mixing blade in the Hamilton Beach MIC2000 is moveable between upper and lower blade positions, the lower blade position reaching the bottom of the Hershey cup when the Hershey cup is in the MIC2000 cup holder (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
wherein the apparatus further includes control means for causing the blade	The Hamilton Beach MIC2000 has a control panel which moves the mixing blade assembly between the

U.S. Patent No. 5,803,377	Comments
assembly to move between the upper and lower blade positions at least twice.	upper and lower blade positions at least twice during the mixing and rinsing processes (Shake Shop Express videos; HBBF28, “Blending or Mixing Instructions”, HBBF25, “Control Panel/Display”; Branson Ex. 24; Branson pp. 102-104; Williams Dep.; physical inspection of MIC2000)
6. The apparatus of claim 2 further comprising: an initiation switch;	On its control panel, the Hamilton Beach MIC2000 has a “START” button to initiate the mixing/blending process (Shake Shop Express videos; HBBF25, HBBF28; Williams Dep.; physical inspection of MIC2000)
a cup sensor for detecting the presence of a cup in the cup support and for producing an output;	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size is in the cup-receiving holder and for producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating up and down blade movement control signals and blade rotation control signals;	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the MIC2000 control panel will automatically generate appropriate up and down blade movement control signals and blade rotation control signals (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a slidable and rotatable shaft attached to the blade assembly and moveable between upper and lower positions corresponding to upper and lower blade positions;	The MIC2000 has a rotatable shaft between the mixing motor and mixing blade assembly which is slidable with respect to the splash shield and moveable between upper and lower positions corresponding to upper and lower blade positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
first and second motors coupled to the shaft,	In the MIC2000, a (first) carriage stepper motor is coupled to the shaft through a carriage to move the shaft up and down and a (second) mixing motor is

U.S. Patent No. 5,803,377	Comments
	coupled to the shaft to rotate the shaft (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the first motor responsive to the blade movement control signals to move the shaft between the upper and lower positions,	The (first) carriage stepper motor is responsive to blade movement control signals from the MIC2000 control panel to move the shaft between upper and lower positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the second motor responsive to the blade rotation control signals to rotate the blade assembly,	The (second) mixing motor is responsive to blade rotation control signals from the MIC2000 control panel to rotate the blade assembly (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
the control means responsive to activation of the initiation switch and to output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.	The MIC2000 control panel prevents the carriage stepper and mixing motors from operating unless a cup of appropriate size is detected in the cup-receiving holder and the user presses the “START” button on the control panel (Shake Shop Express videos; HBBF 25, HBBF28 “Blending or Mixing Instructions”, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
9. The apparatus of claim 1 further comprising: a cup sensor for detecting a characteristic of a cup in the cup support and for producing an output corresponding to the characteristic of the cup; and	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size is present in the cup-receiving holder and for producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispenser being responsive to the liquid dispensing control signals to dispense liquid into the cup.	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the control panel will direct the MIC2000 to dispense an appropriate amount of water into a Hershey cup positioned in the cup receiving holder (Shake Shop Express videos; HBBF29, “Water

U.S. Patent No. 5,803,377	Comments
	Scale”; Williams Dep.; physical inspection of MIC2000)
11. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes contained in a Hershey cup (Shake Shop Express videos: https://www.youtube.com/watch?v=h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to hold its motor and blending components (Shake Shop Express videos; Branson Ex. 24; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 has a cup holder mounted to the blender housing (Shake Shop Express videos; Branson Ex. 24; HBBF25, “Cup Holder”; HBBF43; Williams Dep.; physical inspection of MIC2000)
a rotatable blade assembly mounted within the housing,	The Hamilton Beach MIC2000 has a rotatable blade assembly mounted within the blender housing (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade assembly including shaving elements and aeration elements,	The Hamilton Beach MIC2000 has a mixing blade assembly of slim cross-sectional profile with a sharp depressed edge for shaving the frozen Hershey milkshake and a curved, wave-like shape for aerating the frozen Hershey milkshake (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade assembly movable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the	Through use of a carriage stepper motor, the mixing blade assembly in the Hamilton Beach MIC2000 is moveable between upper and lower blade positions, the lower blade position reaching the bottom of the

U.S. Patent No. 5,803,377	Comments
cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom.	Hershey cup when the Hershey cup is in the MIC2000 cup holder (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
12. The apparatus of claim 11 characterized further in that the blade assembly includes at least one surface area shaped to pump fluid toward the bottom of the cup in response to rotation of the blade assembly.	The MIC2000 rotatable blade assembly is designed to pump milkshake toward the bottom of the Hershey cup during rotation (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
13. The apparatus of claim 11 wherein the blade assembly shaving elements and aeration elements are in close vertical proximity to one another.	The sharp depressed edges for shaving and curved, wave-like shape for aerating on the Hamilton Beach cutting blade assembly are in close vertical proximity to one another (HBBF322, HBBF441; physical inspection of MIC2000)
14. The apparatus of claim 11 wherein the aeration elements include first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade assembly in a fluid the aeration elements cause alternately high and low pressure zones in the fluid, and thus create turbulent eddies which cause a whipping effect.	The aeration elements of the Hamilton Beach MIC2000 include regions which are spaced apart and on different planes, such that rotation of the aeration elements in the Hershey milkshake cause alternately high and low pressure zones in the milkshake and thus create turbulent eddies which cause a whipping effect (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
18. The apparatus of claim 11 wherein the apparatus further includes control means for causing the blade assembly to move between the upper and lower blade positions at least twice.	The Hamilton Beach MIC2000 has a control panel which directs the mixing blade assembly between the upper and lower blade positions at least twice during the mixing and rinsing processes (Shake Shop Express videos; HBBF28, "Blending or Mixing Instructions"; Branson Ex. 24; HBBF25 "Control Panel/Display"; Williams Dep.; physical inspection of MIC2000)
19. The apparatus of claim 11 further including: an initiation switch configured to produce an output when activated by a user;	The Hamilton Beach MIC2000 has a "START" button on its control panel to produce an output signal for initiation of the blending process when the "START" button is pressed by the user (Shake Shop Express videos; HBBF25, "Control Panel/Display"; HBBF28, "Blending or Mixing Instructions"; Williams Dep.;

U.S. Patent No. 5,803,377	Comments
	physical inspection of MIC2000)
a cup sensor for detecting the presence of a cup in the cup support and for producing an output;	The Hamilton Beach MIC2000 has a cup sensor to detect the presence of a cup in the cup holder and convey that information to the control circuitry (Shake Shop Express videos; HBBF25, “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means responsive to activation of the initiation switch and to the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch.	After the user presses the “START” button on the control panel and the cup sensor confirms to the control panel after detection that a cup is present in the cup holder, the MIC2000 control panel will cause the mixing blade to rotate and be lowered into the Hershey cup (Shake Shop Express videos; HBBF25, “Control Panel/Display”; HBBF28, “Blending or Mixing Instructions”; Williams Dep.; physical inspection of MIC2000).
20. The apparatus of claim 11 further comprising: a threaded guide rod mounted within the housing;	The Hamilton Beach MIC2000 has threaded lead screws mounted within the housing (Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a slidable and rotatable blade shaft having the blade assembly attached thereto,	The Hamilton Beach MIC2000 mixing blade assembly is attached to a rotatable mixing shaft that is slidable up and down with respect to the Hershey cup and the MIC2000 splash shield (Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade shaft drivable between upper and lower positions by rotation of the threaded guide rod; and	The Hamilton Beach MIC2000 rotatable mixing shaft is drivable up and down by rotation of the threaded lead screws (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a first motor coupled to the threaded rod for driving the slidable and rotatable blade shaft between upper and lower positions corresponding to the upper and lower blade positions.	The Hamilton Beach MIC2000 has a stepper motor for driving the rotatable mixing shaft up and down in positions corresponding to the upper and lower mixing blade positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
21. The apparatus of claim 20 wherein:	The MIC2000 control panel generates signals to

U.S. Patent No. 5,803,377	Comments
the apparatus further includes control means for generating slidable blade shaft rotation control signals,	control the operation of the rotatable mixing blade assembly, which is slidable with respect to the Hershey cup and the MIC2000 splash shield (Shake Shop Express videos; HBBF25, HBBF27; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the first motor responsive to the slidable blade shaft movement control signals to move the slidable blade shaft between the upper and lower positions; and	The (first) carriage stepper motor is responsive to blade movement control signals from the MIC2000 control panel to move the shaft between upper and lower positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a second motor responsive to the blade rotation control signals to rotate the blade assembly	The (second) mixing motor is responsive to blade rotation control signals from the MIC2000 control panel to rotate the blade assembly (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
22. The apparatus of claim 21 wherein: the apparatus further comprises an initiation switch and a cup sensor for detecting the presence of a cup in the cup support and for producing an output; and	On its control panel, the Hamilton Beach MIC2000 has a “START” button to initiate the mixing/blending process and a cup sensor for detecting whether a cup of appropriate size resides in the cup-receiving holder, both producing an output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF28, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the control means is further for generating the blade movement control signals in response to activation of the initiation switch and the output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.	The MIC2000 control panel prevents the blade assembly from rotating and being lowered into the Hershey cup unless a cup of appropriate size is detected in the cup-receiving holder and the user presses the “START” button on the control panel (Shake Shop Express videos; HBBF 25, HBBF28 “Blending or Mixing Instructions”, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
25. The apparatus of claim 11, further comprising a cup sensor for detecting a characteristic of a cup in the cup support	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size resides in the cup-receiving holder and for producing a

U.S. Patent No. 5,803,377	Comments
and for producing an output corresponding to the characteristic of the cup; and	corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispensing being responsive to the liquid dispensing control signals.	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the control panel will direct the MIC2000 to dispense an appropriate amount of water into a Hershey cup positioned in the cup receiving holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; physical inspection of MIC2000)
27. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes frozen in a Hershey cup. Hershey’s “frozen ice cream” milkshakes are stored before use in a freezer at between 2-3°F (Williams DX8; Guzdar DX3; Branson DX24; Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to hold its motor and blending components (Shake Shop Express videos; Branson Ex. 24; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 blender has a cup holder mounted to the blender housing (Shake Shop Express videos; ‘823 patent, cup-receiving holder 40; HBBF25, “Cup Holder”; HBBF43; Williams Dep.; physical inspection of MIC2000)
a liquid dispenser having an outlet positioned to direct a predetermined volume of liquid into a cup position in	The Hamilton Beach MIC2000 blender has a liquid dispenser with an outlet positioned to dispense a predetermined volume of water into a Hershey cup

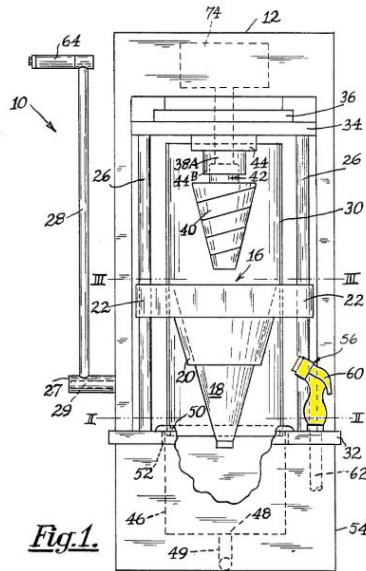
U.S. Patent No. 5,803,377	Comments
the cup support;	positioned in the cup holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; Branson Ex. 24; physical inspection of MIC2000)
a shaft mounted to the housing the shaft carrying a rotatable blade having shaving elements and aeration elements formed thereon,	The Hamilton Beach MIC2000 blender has a mixing shaft mounted in the housing (through its connection to a mixing motor) and carries a rotatable mixing blade of slim cross-sectional profile at its distal end having shaving elements (sharp depressed edges) and aeration elements (curved, wave-like surfaces) formed thereon (Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the shaft moveable relative to the housing to carry the blade between an upper blade position remote from the cup support and a lower blade position adjacent to the cup support,	The Hamilton Beach MIC2000 mixing shaft is movable relative to the housing so that the mixing blade at its distal end is carried between an upper blade position remote from the cup support to a lower blade position adjacent to the cup support (Shake Shop Express videos; Branson Ex. 24; Williams Dep. physical inspection of MIC2000)
the blade configured to, when it is lowered into a cup containing frozen substance, shave the frozen substance, mix the frozen substance with liquid dispensed by the liquid dispenser, and incorporate air into the formed mixture of frozen substance and liquid.	The Hamilton Beach MIC2000 mixing blade is configured to, when it is lowered into the Hershey cup with its frozen milkshake, shave the frozen milkshake (with its sharp depressed edges), mix the frozen milkshake with water dispensed from the water dispenser, and incorporate air (with its curved, wave-like surfaces) into the formed slurry of frozen milkshake and water ((Shake Shop Express videos; HBBF29, “Water Scale”; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)

114. While it is my opinion that claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent are being literally infringed, I also believe that each element of claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent is being infringed under the doctrine of equivalents because each claim element has substantially the same function, is performed in substantially the same way

and achieves substantially the same result as the corresponding elements of the MIC2000 blender.

VII. Copying and Lack Of Suitable Alternative Non-Infringing Substitutes

115. The documents I have reviewed show that, from the very beginning of their design efforts for the MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders, Hamilton Beach carefully studied f'real's patented blenders (see Williams, pp. 17-21; Branson, pp. 9-11; Williams, DX16-19). Over and over again, when it came time to making critical design decisions for the accused blenders, Hamilton Beach's engineers decided that the best solution was to copy f'real's inventions. Perhaps the most important decision Hamilton Beach's engineers made to copy f'real was to use f'real's patented approach to creating a self-rinsing blender. While Hamilton Beach has argued that f'real's self-rinsing blender patents are supposedly anticipated by the prior art Kelly patent, Hamilton Beach's engineers never considered adopting Kelly's approach to cleaning. The Kelly patent discloses placing a kitchen sink-style rinse nozzle next to a blender and manually using that rinse nozzle to clean the blender (see Williams DX33, FIG. 1 – rinse nozzle highlighted):



Hamilton Beach’s engineers testified at their depositions that their customers demanded an automated, self-rinsing machine of the type f’real patented, rather than one with manual cleaning like that shown in the Kelly patent (Williams Dep., pp. 115-118; Pryor Dep., p. 89; Branson Dep., pp. 24-28). As Mr. Pryor aptly put it, “the customer wants the milkshake, not to clean up after themselves” (Pryor Dep., p. 89). Hamilton Beach acknowledged the need for, and its intended use of, the patented f’real technology in its “HBB Business Case Summary” prepared for the IMI2000 project that was the basis for all the accused products, noting: “[t]he method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f’REAL (who have IP in this area that we intend using) and HBB. ... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)” (UNREDACTED “HBB Business Case Summary”, HBBF171458).

116. Yet, Hamilton Beach's engineers went much further than simply copying f'real's idea of a self-rinsing blender - Hamilton Beach's engineers also copied the way f'real designed its self-rinsing blender. Hamilton Beach and Hershey studied the f'real blenders in the

marketplace and shared photographs of the internal components of the f̄real machines (see Waite DX18-19; Holder DX1-3). Like f̄real’s commercial blenders and those shown in f̄real’s self-rinsing blender patents, all of the accused Hamilton Beach blenders point one or more pre-positioned nozzles at the splash shield as claimed in f̄real’s ‘662 patent. All the accused Hamilton Beach blenders also use the type of weighted, free-floating splash shield positioned around the blending spindle shaft that f̄real invented and patented.

117. As a first action item in Hamilton Beach’s work with Hershey, Hamilton Beach and Hershey conducted tests to determine how much water f̄real added to its milkshakes during the blending process (Williams DX16, HBBF37084; Waite DX15). They determined that it “[a]ppears to be about 3 oz. of water added in order to get what we would consider a good shake consistency.” *Id.* Based upon this information, Hamilton Beach designed the MIC2000 to also “automatically deliver 2-3 oz. of water to each cup before it is blended” (Williams DX8, HBBF13114; Waite DX17). Hamilton Beach not only copied f̄real’s idea of adding liquid in the process of reconstituting a frozen milkshake as claimed in f̄real’s ‘377 patent but they decided to use the exact same amount of water that f̄real used.

118. Although there are some differences in the overall appearances of the f̄real and Hamilton Beach blending blades, Hamilton Beach copied the functional attributes of the f̄real blending blades in designing the MIC2000 blending blade. To grind and shave through the frozen Hershey milkshake, Hamilton Beach copied f̄real’s approach of using a blending blade with a “sharp depressed edge and a slim cross-sectional profile” (Williams DX40, HBBF441). While denying at their depositions that their blending blade aerates the Hershey milkshake during blending, Hamilton Beach again copied f̄real’s approach of using a “curved, wave-like structure” with a slim cross-sectional profile on Hamilton Beach’s MIC2000 blade. *Id.* Contrary

to the testimony of Hamilton Beach's engineers, scientific tests of Hamilton Beach's "boat propeller" upper blade shows that it does aerate the Hershey milkshakes as discussed above (see attached Exhibit "B").

119. In a February 25, 2011 e-mail to f'real, Hamilton Beach freely admitted that having access to f'real's technology "certainly gained value [for Hamilton Beach] by eliminating some time in development and building a level of certainty into our design that we might not have otherwise had" (Wood DX19, HBBF619). From the documents and deposition testimony I have reviewed, it is readily apparent that, given Hamilton Beach's and Hershey's objectives, Hamilton Beach's engineers concluded there were no suitable alternative non-infringing substitutes to copying f'real's patented technology. Further, no suitable alternative non-infringing substitutes have been brought to my attention.

VIII. f'Real's Use Of Its Patented Technology

120. I understand that f'real introduced its first self-rinsing blender, the FLRB2 ("B2"), in 2003. The B2 blender is pictured below:



121. As can be seen in the interior photograph, f'real's B2 blender has a weighted splash shield mounted concentrically on the B2 spindle above the mix blade. On the left side of the mix chamber are two rinse nozzles, one pointing upward toward the underside of the splash shield and the other pointed downward toward the spindle and top of the splash shield. These two rinse nozzles are used for rinsing the mix chamber in the f'real B2 blender. Further information about the B2 blender can be found in the "Installation and Operation Guide for f'real FRLB2 blender."

122. I have been told that f'real introduced an upgrade to the B2 blender in about 2010 which it designated as the FLRB4 ("B4") blender. Some of the most notable improvements in the B4 blender was the capability to automatically steam sanitize the mix chamber as well as a colorful video display. f'real's B4 blender is pictured below:



123. Like the B2 blender, f'real's B4 blender has a weighted splash shield mounted concentrically on the B4 spindle above the mix blade. Instead of metal rinse nozzles, the B4 blender uses four plastic rinse nozzles. Some of the four B4 rinse nozzles are shown in the right B4 photograph above. As with the B2 blender, the B4 blender has one of its rinse nozzles

pointing upward toward the underside of the splash shield and another rinse nozzle pointed downward toward the spindle and top of the splash shield. Further information about f̄real's B4 blender can be found in the document entitled "In-Cup Blender With Chemical-free Automated Clean-in-Place System: Model FRLB4" (FREAL131216-131220)

124. f̄real introduced its FLRB6 ("B6") blender in about 2016. A significant improvement in the B6 blender is its modular construction. f̄real's B6 blender is pictured below:



125. Like the B2 and B4 blenders, f̄real's B6 blender has a weighted splash shield mounted concentrically on the B6 spindle above the mix blade. Like the B4 blender, the B6 blender uses four plastic rinse nozzles. Some of the four B6 rinse nozzles are shown in the right B6 photograph above. As with the B2 and B4 blenders, the B6 blender has one of its rinse nozzles pointing upward toward the underside of the splash shield and another rinse nozzle pointed downward toward the spindle and top of the splash shield. Further information about f̄real's B6 blender can be found in U.S. Published Patent Application No. 2018/0132663.

126. For the reasons explained in the following charts, I conclude that f'real's B2, B4 and B6 blenders and their standard method of use practice the inventions claimed in at least claim 21 of the '662 patent, claim 15 of the '150 patent and claim 1 of the '658 patent:

U.S. Patent No. 7,520,662	Comments
21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:	f'real's B2, B4 and B6 mixing machine blenders automatically perform a method for rinsing a splash shield after the f'real milkshake is blended and removed
providing a vessel containing material to be mixed, the vessel including an opening:	f'real's frozen cups used with f'real's B2, B4 and B6 blenders have frozen milkshake, smoothie or cappuccino inside and include a top opening
further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield:	f'real's B2, B4 and B6 blenders have a cup holder for receiving the f'real cup, a rotatable mixing blade extendable into the cup for mixing the frozen milkshake, smoothie or frozen cappuccino, a splash shield positionable to shield the top opening of the f'real cup, and pre-positioned rinse nozzles oriented to spray rinse water towards soiled surfaces of the splash shield
After mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.	After f'real's B2, B4 and B6 blenders mix the frozen milkshake, smoothie or cappuccino in the f'real cup while the splash shield lid is shielding the cup opening, the f'real cup is lowered to allow the f'real cup to be removed. f'real's B2, B4 and B6 blenders then automatically direct rinsing fluid onto soiled surfaces of the splash shield using the prepositioned rinse nozzles. Since the f'real cup is removed from the f'real mixing chamber before the automatic rinsing, the f'real cup is isolated from the rinsing fluid during the rinsing step

U.S. Patent No. 7,520,658	Comments
1. A mixing machine for mixing a liquid in a vessel having an opening, the mixing machine comprising:	f'real's B2, B4 and B6 mixing machine blenders mix a liquid milkshake, smoothie or cappuccino contained in a cup (vessel) with a top opening
a holder coupled to the mixing machine, the holder proportioned to receive a vessel;	f'real's B2, B4 and B6 blenders each have a cup holder proportioned to receive the f'real cup
a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;	f'real's B2, B4 and B6 blenders each have a rotatable blending/mixing blade that is extendable through the top opening of the cup positioned in the cup holder for mixing the drink contents contained in the cup
a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;	f'real's B2, B4 and B6 blenders each have a carriage motor operatively coupled to the cup holder to effect axial translation of the mixing blade from a first (in this case lower) mixing position to a second (in this case upper) mixing position, the mixing blade being positioned further from the cup opening when in the first (lower) mixing position than in the second (upper) mixing position
a shaft; and	f'real's B2, B4 and B6 blenders each have a mixing shaft between the mixing motor and mixing blade element
a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.	f'real's B2, B4 and B6 blenders each have a splash shield slidable on the mixing shaft (through an aperture in the splash shield lid) between a first (in this case lower) splash shield position and a second (in this case higher) splash shield position, the splash shield in the second (higher) position positionable with its splash shield lid covering the cup opening and being unrestrained against a sliding movement on the mixing shaft in a direction away from the cup opening, the splash shield having sufficient mass (when its lid covers the cup opening) to retain the cup within the cup holder during relative axial movement of the mixing blade and the

U.S. Patent No. 7,520,658	Comments
	cup from the first (lower) shield position to the second (higher) shield position when liquid is present in the cup

U.S. Patent No. 7,144,150	Comments
15. On a mixing machine for mixing a liquid contained in a vessel having an opening,	f'real's B2, B4 and B6 blenders each mix milkshake, smoothie and cappuccino liquids in a cup (vessel) having an opening at its top
the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:	f'real's B2, B4 and B6 blenders each have a rotatable mixing blade element extendable into the cup for mixing the contents of the cup
a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;	f'real's B2, B4 and B6 blenders each have a rinse chamber with an entrance and a trap door movable to a closed position covering the entrance
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and	f'real's B2, B4 and B6 blenders each carry a splash shield which is positionable so that its splash shield lid covers the top opening of the cup
at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber	f'real's B2, B4 and B6 blenders each have multiple nozzles coupled, through a water hose opening at the back of the blender, to a source of rinse fluid. The nozzles are oriented to direct rinse fluid onto the splash shield within the rinse chamber

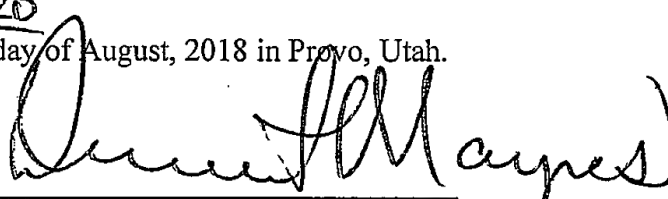
IX. Revision or Supplementation

127. I reserve the right to modify and/or supplement this report based on information that may subsequently become available in this matter.

X. Demonstrative Exhibits

128. If called to testify at trial, I may prepare demonstrative exhibits, such as PowerPoint presentations, charts and/or graphs, to further explain my opinions.

Executed on this 23rd day of August, 2018 in Provo, Utah.

A handwritten signature in black ink, appearing to read "Daniel Maynes", written over a horizontal line.

Daniel Maynes, Ph.D

EXHIBIT A

Professor Daniel Maynes C.V.

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Experience

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Associate Chair of Mechanical Engineering (2005 – 2013)
Professor of Mechanical Engineering (2009 – Present)
Associate Professor of Mechanical Engineering (2003 – 2009)
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Post-Doctoral Research Professor (1997)
Instructor of Mechanical Engineering (1994 – 1997)
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Research Assistant (1992 – 1993)
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Research Assistant (1990)
Consultant for many industrial and legal sponsors (1992 – Present)

Expertise/Interests

Microscale fluid mechanics and heat transfer, superhydrophobic surfaces, electroosmotic flow transport phenomena, turbomachinery design and analysis, turbulent mixing, turbulence induced structural vibrations, convection heat transfer and fluid mechanics applications

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Professor Daniel Maynes C.V.

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100. T. Haws and D. Maynes, 1999, "Steady State Axial and Tangential Velocity Characteristics for Rotating Bluff Bodies," *Proceedings of the 36th Heat Transfer and Fluid Mechanics Institute*, Sacramento CA, pp. 211-230, May 1999.
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Ph.D. Dissertation:

R. D. Maynes, 1997, "On Rotating Bluff Body Flows," University of Utah.

M.S. Thesis:

R. D. Maynes, 1993, "An Investigation of the Effects of a Rotating Forebody on the Aerodynamics of Slender Bodies at High Angles of Attack" Utah State University.

Research Funding

PI or co-PI on extramural grants totaling \$5.4M from industrial and government sponsors

PI on intramural funding totaling \$145K

Extramural Funding:

Union Pacific, "Development and Optimization of an Origami Inspired Front Mount Locomotive Drag Reducer," PI – D. Maynes, \$78,000, 2015-16.

Office of Naval Research, PI – D. Maynes, \$175,000, 2015-16.

Moxtek, "Droplet Formation and Removal Characteristics on Superhydrophobic Nano and Microstructured Surfaces," PI – J. Crockett (D. Maynes co-PI), \$35,000, 2015-16.

ConceptsNREC, "CFD Analysis Turbomachinery Components," PI – D. Maynes, \$8,000, 2015.

NASA, Droplet Mobility in Superhydrophobic Channels, PI – J. Crockett (D. Maynes co-PI), \$21,500, 2014-2015.

Air Force SBIR Phase II through ConceptsNREC, "Optimizing the Design of an SCD device in Turbopump inducers," PI – D. Maynes, \$105,000, 2014-2016

Union Pacific, "Aerodynamics of Intro-Modal Train Cars", PI – D. Maynes, \$45,000, 2014-2015.

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National Science Foundation, "Supplement to Turbulent Flow Drag Reduction Using Surfaces Exhibiting Superhydrophobicity and Riblets," PI – D. Maynes, \$10,000, 2013.

ConceptsNREC, "CFD Modeling of Inducers," PI – D. Maynes, \$15,000, 2013-2014.

ConceptsNREC, "CFD Modeling of the LSAM Inducer," PI – D. Maynes, \$20,000, 2013.

Union Pacific, "Railroad Fuel Efficiency – Addendum," PI – D. Maynes, \$17,000, 2013-2014.

National Science Foundation, "Convective Thermal Transport at Superhydrophobic Surfaces," PI – D. Maynes, \$324,823, 2011-2014.

Union Pacific, "Railroad Fuel Efficiency," PI – D. Maynes, \$45,000, 2012-2013.

National Science Foundation, "Supplement to Turbulent Flow Drag Reduction Using Surfaces Exhibiting Superhydrophobicity and Riblets," PI – D. Maynes, \$6,000, 2011.

Union Pacific, "Reducing air drag on coal cars using covered coal cars," PI – D. Maynes, \$17,048, 2011.

National Science Foundation, "Development of a Multi-Camera Synthetic Aperture Technique for Measuring High-Speed, Unsteady, Three-Dimensional Velocity Fields of Fluid Flow," PI – T. Truscott, \$410,000 (Maynes – CoPI with two others). 2011-2014.

NASA STTR Phase II through ConceptsNREC "High Inlet Diffusion Low Flow Coefficient Inducers for Near Zero NPSP," PI- D. Maynes, \$183,000, 2011-2013

National Science Foundation, "Turbulent Flow Drag Reduction Using Surfaces Exhibiting Superhydrophobicity and Riblets," PI – D. Maynes, \$360,000, 2011-2014.

National Science Foundation, MRI: Acquisition of a versatile direct write micro patterning system for research and education, PI –D. Austin, \$288,000, 2010 (Maynes-Co-Investigator with three others).

CCIV Valve, "High Speed Interacting Air Jets: Noise and Flow Characterization," PI – D. Maynes, \$49,000, 2010-2012.

NASA STTR through ConceptsNREC, "High Inlet Diffusion Low Flow Coefficient Inducers for Near Zero NPSP," PI- D. Maynes, \$40,000, 2010-2011.

CCIV Valve, "Flow Induced Vibration in Cavitating Systems," PI – D. Maynes, \$75,000, 2010-2011.

ConceptsNREC, "Performance, Prediction, Verification, and Analysis of Centrifugal Flow Impellers; Phase V," PI – D. Maynes, \$42,000, 2009-2010.

CCIV Valve, "Flow Induced Vibration in Cavitating Systems, PI – D. Maynes, \$50,000, 2009-2010.

Genscape Inc., "Turbulent Flow Induced Vibration in Pipe Systems, Phase III" PI – D. Maynes, \$50,000, 2009-2010.

General Electric, "Ash Deposition in Industrial Reactors; Phase III," PI – L. L. Baxter, \$200,000, 2008 – 2009 (Maynes-Co-Investigator with others).

ConceptsNREC, "Performance, Prediction, Verification, and Analysis of Centrifugal Flow Impellers; Phase IV," PI – D. Maynes, \$45,000, 2008-2009.

Genscape Inc., "Turbulent Flow Induced Vibration in Pipe Systems, Phase II" PI – D. Maynes, \$50,000, 2008-2009.

National Science Foundation, MRI Equipment Grant for a Chlorine ICP Reactive Ion Etcher, PI – A. Hawkins, \$300,000, 2007 (Maynes-Co-Investigator with several others).

General Electric, "Ash Deposition in Industrial Reactors; Phase II," PI – L. L. Baxter, \$254,000, 2007 – 2008 (Maynes-Co-Investigator with others).

ConceptsNREC, "Performance, Prediction, Verification, and Analysis of Centrifugal Flow Impellers; Phase III," PI – D. Maynes, \$44,000, 2007-2008.

Genscape Inc., "Turbulent Flow Induced Vibration in Pipe Systems, Phase I" PI – D. Maynes, \$50,000, 2007-2008.

CCIV Valve, "Turbulent Flow Induced Vibration in Pipe Systems, PI – D. Maynes, \$100,000, 2007 – 2008.

ConceptsNREC, "Performance, Prediction, Verification, and Analysis of Centrifugal Flow Impellers; Phase II," PI – D. Maynes, \$50,000, 2006-2007.

General Electric, "Ash Deposition in Industrial Reactors," PI – L. L. Baxter, \$475,000, 2006 – 2007 (Maynes Co-Investigator with others).

Sonic Innovations, "Prediction, Management, and Removal of Moisture in Confined Spaces, PI – D. Maynes, \$22,000, 2006 – 2007.

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Torion Technologies Inc. "Ion Mobility Focusing," PI – M. L. Lee, \$200,000, 2003 – 2008 (Maynes Co-Investigator).

National Institute of Health, "Electromobility Focusing for Separation of Proteins," PI – M. L. Lee, \$1,465,000, 2003 – 2008 (Maynes Co-Investigator from 2004 – 2006 with several others).

ConceptsNREC, "Performance, Prediction, Verification, and Analysis of Centrifugal Flow Impellers Phase I," PI – D. Maynes, \$44,000, 2005.

National Science Foundation, "REU Supplement to Transport Phenomena Associated with Liquid Flow through Microtubes," PI – D. Maynes, \$10,000. 2000 – 2002.

National Science Foundation, "Transport Phenomena Associated with Liquid Flow through Microtubes," PI – D. Maynes, \$70,000, 2000 – 2002.

Lawrence Livermore National Laboratory, Equipment Donation, PI – D. Maynes, \$20,000, 1997 – 1998.

Lawrence Livermore National Laboratory, "Characterization of the Hydrodynamics Associated with the Rapid growth of KDP Crystals from Solution," PI – D. Maynes, \$23,000, 1997 – 1998.

Intramural Funding:

IRA A. Fulton College of Engineering Faculty Research Fellowship, "Convective Heat Transfer at Superhydrophobic Surfaces," PI – D. Maynes, \$20,000, 2011.

Brigham Young University Graduate Mentoring Program, "Experimental Characterization of Flow Dynamics over Superhydrophobic Surfaces," PI – D. Maynes, \$5,000, 2010.

Brigham Young University Graduate Mentoring Program, "Experimental Characterization of Flow Dynamics over Superhydrophobic Surfaces," PI – D. Maynes, \$5,000, 2009.

Brigham Young University Mentoring Environment for Undergraduate Research, "Experimental Characterization of the Flow Dynamics Associated with Micro- and Nanofabricated Superhydrophobic Surfaces," PI – D. Maynes, \$18,000, 2008 – 2010.

College of Engineering – BYU, "Experimental Flow-Loop for Characterizing Turbulence-Induced Vibration in Pipe Flows," PI – D. Maynes, \$17,000, 2007 – 2008.

Brigham Young University Mentoring Environment for Undergraduate Research, "Analysis and Design of Microfluidic Devices Utilizing Nanoengineered Surfaces, PI – D. Maynes, \$18,000, 2005 – 2006.

College of Engineering – BYU, "Reducing and Characterizing the Wall Shear Stress on Nanoengineered Surfaces, PI – D. Maynes, \$15,000, 2004.

Brigham Young University Mentoring Undergraduate Research Award, "Electro-Osmotic Flow And Heat Transfer," PI – D. Maynes, \$19,000, 2001 – 2002.

Brigham Young University Academic VP Research Award, "Characterization of the Flow through Microtubes," PI – D. Maynes, \$20,000, 1999 – 2000.

College of Engineering - BYU, "Temperature Profile Measurements using Molecular Tagging Velocimetry," PI – D. Maynes, \$18,000, 1998 – 1999.

Teaching and Mentoring Activities/Awards

Student Mentoring:

- 7 Ph.D. Dissertations
- 29 M.S. Theses
- 2 B.S. Honors Theses
- 60+ undergraduate research assistants

Teaching Activities:

- Taught five different undergraduate courses:
 - ME EN 101 – Static Systems in Mechanical Engineering
 - ME EN 312 – Fluid Mechanics
 - ME EN 321 – Thermodynamics
 - ME EN 412 – Applied Fluid Dynamics
 - ME EN 475/6 – Capstone Coach

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- Taught four different graduate level courses:
 - ME EN 510 – Compressible Fluid Flow
 - ME EN 512 – Intermediate Fluid Mechanics
 - ME EN 540 – Intermediate Heat Transfer
 - ME EN 643 – Convective Heat Transfer
- Instructor rating for every class taught at BYU has been above the University, College, and Department average ratings
 - Average instructor rating over past 5 years is 7.3 on an 8.0 scale

Professional Activities/Awards

- Member, American Physical Society (APS)
 - Organizing Committee for the 2007 APS Division of Fluid Dynamics Annual Meeting
 - APS Division of Fluid Dynamics Session Chair at multiple annual conferences
- Member, American Society of Mechanical Engineers (ASME)
 - Associate Editor for the ASME Journal of Fluids Engineering, 2013 – present
 - Elected to Fellow Status - 2015
 - Member of the Micro and Nano-Fluid Dynamics Division Technical Committee, 2005 – present
 - Awards subcommittee co-chair, 2009-2011
 - Co-Organizer of the Micro- and Nanofluid Mechanics Forum at the 2009 ASME Summer Fluids Engineering Division Conference.
 - Coordinated the review and organization of 8 technical sessions with 40 submitted papers
 - ASME Conference Session Chair at many conferences
 - P.E. Exam Review Instructor
- Technical Reviewer for 20+ Archival Journals
- Frequent Technical Reviewer for NSF and Petroleum Research Fund proposals
- Distinguished Alumni Award from the Department of Mechanical and Aerospace Engineering at Utah State University, 2015
- BYU College of Engineering Stand and Deliver Teaching Award, 2004
- BYU College of Engineering Outstanding Faculty Award in Mechanical Engineering, 2006
- BYU College of Engineering Faculty Research Fellowship Award, 2011-2013
- BYU Phi Kappa Phi Award for Outstanding Achievements in Citizenship, Teaching, and Scholarship, 2013.

Department/Committee Assignments

- Chair of Mechanical Engineering, 6/13-Present
- Associate Department Chair of Mechanical Engineering, 9/05 – 6/13
- ME EN Department Course Scheduler, 8/03 – Present
- Department Advancement in Rank Committee, 8/10 – 8/12
- Thermal Science Ad Hoc Committee 1997 – Present
- ABET committee, 2001 – 2003
- ME EN Graduate Program Committee, 1997 – 2001
- Manufacturing Integration Committee, 1999
- Ph.D. Qualifying Exam Committees:
 - Fluid Mechanics, Thermodynamics, Heat Transfer – Ongoing
- Curriculum Committees:
 - Fluid Mechanics, Thermodynamics, Heat Transfer – Ongoing
- Tau Beta Pi Advisor for Mechanical Engineering, 1997 – 1998

EXHIBIT B

Evaluating Whether MIC2000 Aerates Frozen Products

Initial Test

June 22, 2015

Tests conducted by Curtis Tom and documented by Jens Voges

Introduction

We have previously observed that when one puts aerated frozen product (product with overrun) into a blender, the blender typically first reduces the aeration. Adding liquid typically further reduces the aeration. The MIC2000 is assumed to do both.

Hypothesis

The question is whether the MIC2000 subsequently (re-)aerates the frozen product. The hypothesis is that it does, especially considering the presence of the wave-like wing on its spindle assembly, in addition to the multiple whipping cycles that it incorporates into the blend profile.

Summary Test Description and Results

To test the hypothesis the following experiment was conducted on Friday, June 19 and Saturday, June 20, 2015.

- 1) 4 Hershey Creamery Cups were filled with enough f' real melted product such that the pre-blend fill height was approximately 0.82" from the top of the cup – the fill height Hershey Creamery has been previously observed to use for their products. The picture below shows a representative sample after freezing the product. Since we don't have a commercial hardening chamber in our office, a standard walk-in freezer was used to freeze the product. The domed top surface of the frozen product is an artifact of that freezing approach.



- 2) Water was added to the top of the frozen product. Since the MIC2000 unit we have in the office isn't injecting water during the blend cycle, water was manually added right before blending.

Note that this workaround may underrepresent the potential aeration since the blender is more likely to fling some of the water out of the cup in this configuration. The first cup was filled with approximately 78 ml of water on top of the frozen product based on the field observations that the blender adds roughly 2.7 fl oz of water or 79.8 ml. The below picture shows the cup with the water added prior to blending.



- 3) The cup completely overflowed during blending. A very rough estimate is that 1/3 of the product contents were lost. This first sample strongly indicated that aeration was occurring due to the significant volume expansion.
- 4) Since so much product was lost, less water was added to the subsequent samples. Roughly 30 ml was added to the second sample, 20 ml to the third and 10 ml to the fourth sample. A picture of the third sample with 20 ml added pre-blending is shown below.



- 5) In the first 3 samples, an appreciable amount of product spilled out of the cup during blending indicated that the post blend volume exceeded the volume of the cup. The 4th sample had minimal/overflow. A picture of the product remaining in all four cups post blending is shown below. Note that the post blend volume of the 4th sample (all the way on the right) still comes almost to the rim.



Conclusion

While more scientific and controlled testing may be worth pursuing, this test indicates that the MIC2000 is aerating the product as evidenced by the post blend volume exceeding the pre-blend volume of a product that starts with zero (or close to zero) overrun.

HB BLENDER OVERRUN REPORT

OBJECTIVE

The goal of this study is to evaluate the overrun changes throughout the blending process, specifically as it relates to the claim that the Hamilton Beach MIC 2000 blender does not change the overrun during the blending, and all overrun is created during freezing (before blending).

MATERIALS AND METHODS

The test was conducted according to the final procedure for Determination of Overrun in Pre-blend and Blended Products TP000X (attached). We evaluated products with no inclusions (chocolate, vanilla, and strawberry milkshakes).

We tested three sets of samples.

The first set of samples included commercial products made by Hershey Creamery Co. (chocolate, vanilla, strawberry). The commercial products have high overrun created before blending (during freezing).

The first set was tempered at 12°F overnight. The volume of water added during blending (both shots) was 143 ml according to the procedure TP00X.

The second set of samples included the same commercial products with high initial overrun (chocolate, vanilla, strawberry). These samples were tempered at 5°F overnight. The added water volume (both shots) was reduced to 86.5-87.0 g (approx. 3 oz). The blender manual recommends calibrating water shots to accommodate different water pressures and avoid excessive product leaking during mixing.

The third set of samples included two products (chocolate and vanilla) **with the overrun removed**. In order to remove the overrun the samples were allowed to melt at room temperature overnight and then were warmed up to 100-110°F and kept at this temperature for 4 hours in a water bath. We periodically added hot water. This allowed air to escape. Then the samples were frozen and tempered overnight at 5°F. The added water volume (both shots) was 86.5-87.0 g (approx. 3 oz), same as for the second set.

The density of the mix was calculated based on the measured total solids and total fat.

We measured overrun at four points in the blending process (for all samples):

1. Before blending,
2. After 2 cycles (bore and slow whip),
3. After 3.5 cycles, (whip)
4. After 6 cycles (bore and whip)- full blend.

DISCUSSION

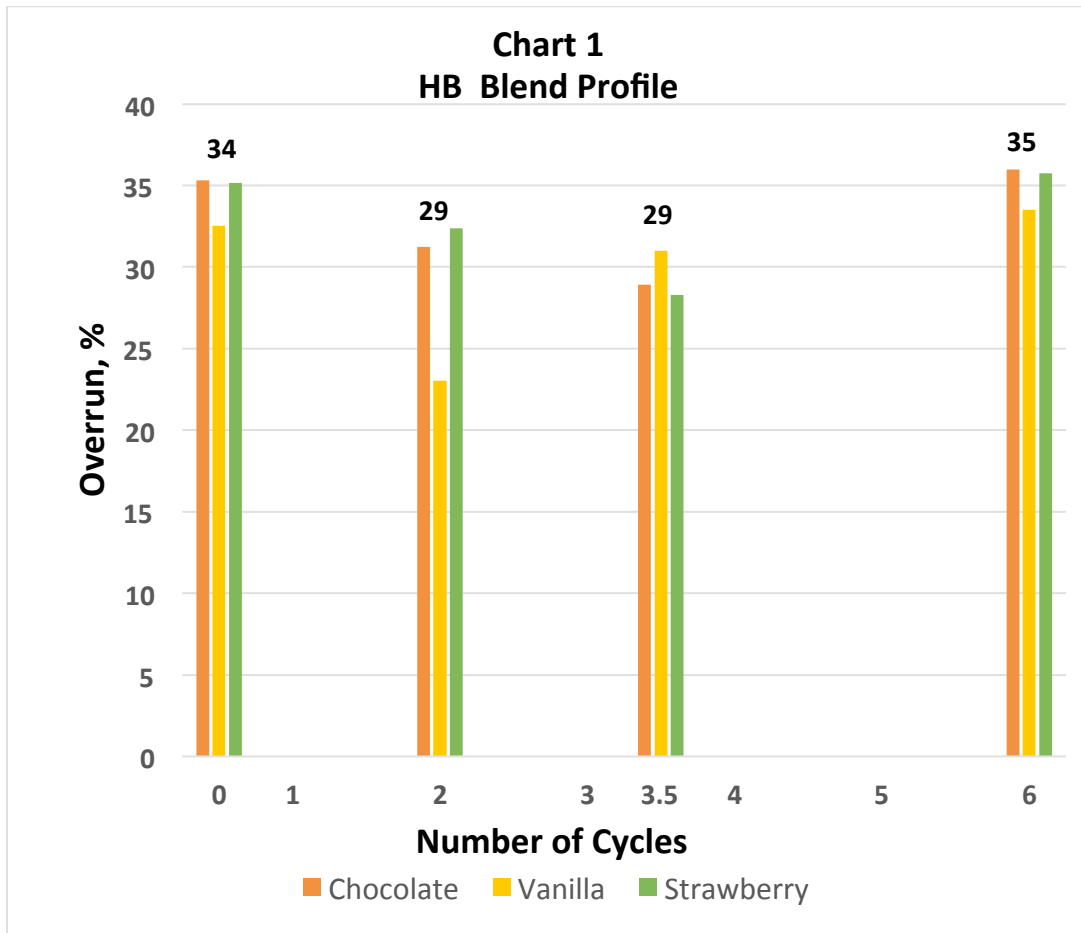
The first set of samples at 12°F was very soft before blending.

The blended products were very thin and watery, like a beverage not a milkshake. It did not look like the right texture.

There was significant spilling of the product during blending. Approximately 100-120g of the product was spilled. This would compromise the accuracy of the test. It appeared that the product temperature before blending was too high and the added water volume was too high as well.

For these reasons we did not present the data from the first set.

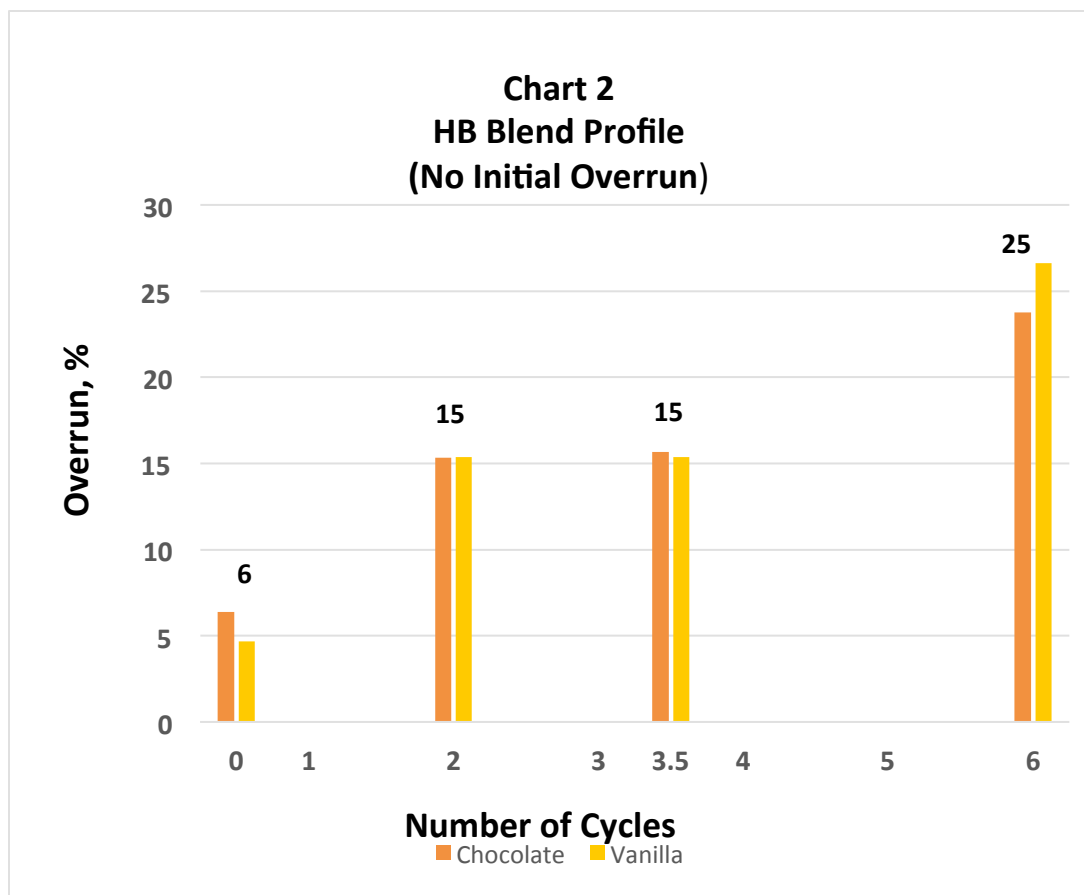
The results for the second set of samples are presented in Chart 1.



Each data point is an average of three measurements (three blended cups). The data show that all three products (chocolate, vanilla, and strawberry) are very close in initial overrun, in blending profile, and in the final overrun.

If we take an average of these three products (each data point will be an average of 9 measurements) we can see that the initial overrun (before blending) is around 34%. After 2 cycles (bore and slow whip) the overrun was reduced to 29%. After 3.5 cycles (whip) the overrun was still 29%. After complete blending - 6 cycles (bore and whip) the overrun increased to 35%, which is essentially the same as the initial overrun before the blending.

The results for the third set of samples (with the overrun removed) are presented in Chart 2.



Each data point is an average of three measurements for vanilla (three blended cups) and two measurements for chocolate (two blended cups). The data show both products (chocolate and vanilla) are very close in initial overrun, in blending profile, and in the final overrun.

For both products the initial (remaining) overrun was close to 6%.

The chart shows that the overrun increase gradually during the blending process. The overrun reached about 25% after the full blending.

The overrun did not reach the same level as in the products with high initial overrun, where the overrun was created before blending (during freezing) and during the last stage of the blending.

CONCLUSIONS

1. For the commercial products (with high initial overrun) the overrun after blending (35%) was essentially the same as the overrun before blending (34%). However, the HB blender reduces the overrun during the early part of the blending process and then it whipped the product and increased the overrun back to the initial level.
2. For the products with very low initial overrun, the overrun increased gradually during the whole blending process and reached 25% at the end of the blending.
3. The HB blender increased the overrun significantly, especially for the samples with low initial overrun.

ADDITIONAL OBSERVATIONS

1. About $\frac{1}{4}$ to $\frac{1}{3}$ of the product in the cup was not blended (on the bottom and on the sides), because the blending blade does not have a moving piece. The product that was actually blended, was thin, more like a beverage, not a milkshake.
2. Every blended cup had some product spilled. The spilled amount was on average 22g (between 16g and 35g). When we observed the HB blender operation at a trade show, we also noticed some product spilling.
3. All blended cups were below the declared volume of 400 ml (13.5 fl. oz) as stated on the labels. The average volume of the blended milkshakes was 370 ml with the range between 351 ml and 380 ml. That was due to the spilled product and low initial fill volume.
4. The initial product volume (before blending) was between 291 ml and 313 ml. The declared volume is 312 ml (10.5 fl. oz).

Appendix 1: Data to Determine Blended Overrun for Commercial Products (with High Initial Overrun)

Water shots total: 86.5 g (3 Oz)

Temperature: 5F

Cup #	Test Sample	Unfrozen Mix Volume per cup (mL) Variable U (calculated)	Full Cup of Water (g) Variable V	Pre-blend water added to headspace (g) Variable W	Total Weight Before Blend (g) Variable X	Total Weight after Blend (g) Variable Y	Blended product water added to headspace (g) Variable Z	
16	Chocolate 5210 20:59	230.55	480.00		259.60	306.90	139.50	3 1/2 cycles
17	Chocolate 5210 20:60	228.06	480.00		256.80	293.00	148.00	3 1/2 cycles
18	Chocolate 5210 20:61	222.29	480.00		250.30	296.60	145.10	3 1/2 cycles
19	Chocolate 5210 20:62	226.11	480.00		254.60	296.10	142.50	2 cycles
20	Chocolate 5210 20:63	229.66	480.00		258.60	287.80	148.20	2 cycles
21	Chocolate 5210 19:54	232.33	480.00		261.60	297.10	140.20	2 cycles
4	Chocolate 5210 20:57	224.25	480.00		252.50	318.10	110.10	Full blend
5	Chocolate 15:27 5147	225.49	480.00		253.90	322.50	106.20	Full blend
6	Chocolate 15:27 5147	222.65	480.00		250.70	318.30	107.50	Full blend
20	Strawberry 5210 17:05	236.19	480.00		265.00	299.80	131.10	2 cycles
21	Strawberry 5210 17:05	220.59	480.00		247.50	282.90	150.00	2 cycles
22	Strawberry 5210 17:05	222.64	480.00		249.80	292.30	146.80	2 cycles
23	Strawberry 5210 17:05	221.21	480.00		248.20	286.70	157.80	3 1/2 cycles
24	Strawberry 5210 17:05	230.66	480.00		258.80	296.70	147.10	3 1/2 cycles
25	Strawberry 20:51 5075	233.78	480.00		262.30	297.10	144.20	3 1/2 cycles
10	Strawberry 5182 16:45	228.70	480.00		256.60	323.80	103.50	Full blend
11	Strawberry 5182 17:31	224.60	480.00		252.00	322.60	99.60	Full blend
3	Strawberry 5182 16:46	231.28	480.00		259.50	324.20	105.20	Full blend
21	Vanilla 4325 15:28	224.91	480.00		251.90	287.40	178.00	2 cycles
22	Vanilla 15:32 5148	227.77	480.00		255.10	283.20	177.20	2 cycles
23	Vanilla 15:43 5146	231.25	480.00		259.00	295.30	143.10	2 cycles
24	Vanilla no code	226.25	480.00		253.40	286.10	153.20	3 1/2 cycles
25	Vanilla no code	225.98	480.00		253.10	288.90	151.80	3 1/2 cycles
26	Vanilla 5209 19:22	221.96	480.00		248.60	281.00	151.10	3 1/2 cycles
10	Vanilla 16:58 5075	229.82	480.00		257.40	315.20	113.20	Full blend
11	Vanilla 16:59 5075	225.54	480.00		252.60	304.00	128.50	Full blend
2	Vanilla 15:32 5148	224.38	480.00		251.30	317.60	115.30	Full blend

Appendix 2: Formula to Determine Blended Overrun for Commercial Products (with High Initial Overrun)

Cup #	Test Sample	Water Shot Volume (mL)	Product Volume (mL)	Air added during blending (mL)	% Overrun		AVERAGE OVERRUN
	Formula	$D = Y - X$	$N = V - Z$	$E = N - (+ D)$	$E/U*100$		
16	Chocolate 5210 20:59	47.30	340.50	62.65	27.17	3 1/2 cycles	28.90
17	Chocolate 5210 20:60	36.20	332.00	67.74	29.70	3 1/2 cycles	
18	Chocolate 5210 20:61	46.30	334.90	66.31	29.83	3 1/2 cycles	
19	Chocolate 5210 20:62	41.50	337.50	69.89	30.91	2 cycles	31.22
20	Chocolate 5210 20:63	29.20	331.80	72.94	31.76	2 cycles	
21	Chocolate 5210 19:54	35.50	339.80	71.97	30.98	2 cycles	
4	Chocolate 5210 20:57	65.60	369.90	80.05	35.70	Full blend	36.00
5	Chocolate 15:27 5147	68.60	373.80	79.71	35.35	Full blend	
6	Chocolate 15:27 5147	67.60	372.50	82.25	36.94	Full blend	
20	Strawberry 5210 17:05	34.80	348.90	77.91	32.99	2 cycles	32.37
21	Strawberry 5210 17:05	35.40	330.00	74.01	33.55	2 cycles	
22	Strawberry 5210 17:05	42.50	333.20	68.06	30.57	2 cycles	
23	Strawberry 5210 17:05	38.50	322.20	62.49	28.25	3 1/2 cycles	28.30
24	Strawberry 5210 17:05	37.90	332.90	64.34	27.89	3 1/2 cycles	
25	Strawberry 20:51 5075	34.80	335.80	67.22	28.75	3 1/2 cycles	
10	Strawberry 5182 16:45	67.20	376.50	80.60	35.24	Full blend	35.75
11	Strawberry 5182 17:31	70.60	380.40	85.20	37.93	Full blend	
3	Strawberry 5182 17:33	64.70	374.80	78.82	34.08	Full blend	
21	Vanilla 4325 15:28	35.50	302.00	41.59	18.49	2 cycles	23.03
22	Vanilla 15:32 5148	28.10	302.80	46.93	20.61	2 cycles	
23	Vanilla 15:43 5146	36.30	336.90	69.35	29.99	2 cycles	
24	Vanilla no code	32.70	326.80	67.85	29.99	3 1/2 cycles	30.99
25	Vanilla no code	35.80	328.20	66.42	29.39	3 1/2 cycles	
26	Vanilla 5209 19:22	32.40	328.90	74.54	33.58	3 1/2 cycles	
10	Vanilla 16:58 5075	57.80	366.80	79.18	34.45	Full blend	33.50
11	Vanilla 16:59 5075	51.40	351.50	74.56	33.06	Full blend	
2	Vanilla 15:32 5148	66.30	364.70	74.03	32.99	Full blend	

Appendix 3: Data to Determine Pre-blend Overrun for Commercial Products (with High Initial Overrun)

Cup #	Test Sample	Unfrozen Mix Volume per cup (mL) Variable U (calculated)	Full Cup of Water (g) Variable V	Pre-blend water added to headspace (g) Variable W	Total Weight Before Blend (g) Variable X	Total Weight after Blend (g) Variable Y	Blended product water added to headspace Variable Z
1	Chocolate 16:03 5147	215.54	480.00	188.02	242.7	n/a	n/a
2	Chocolate 16:03 5147	214.85	480.00	189.2	241.92	n/a	n/a
3	Chocolate 16:03 5147	215.83	480.00	188.42	243.03	n/a	n/a
1	Strawberry 5182 16:46	229.21	480.00	167.5	257.17	n/a	n/a
2	Strawberry 5182 16:46	228.52	480.00	172.2	256.4	n/a	n/a
3	Strawberry 5182 16:46	231.57	480.00	168.7	259.82	n/a	n/a
1	Vanilla 15:32 5148	223.10	480.00	185.2	249.87	n/a	n/a
2	Vanilla 15:32 5148	224.32	480.00	182.48	251.24	n/a	n/a
3	Vanilla 15:32 5148	226.14	480.00	179.66	253.28	n/a	n/a

Appendix 4: Formula to Determine Pre-blend Overrun for Commercial Products (with High Initial Overrun)

Cup #	Test Sample	Product Volume (mL)	Added air during freezing (mL)	% Overrun	Avg Overrun
	Formula	$A = V - W$	$B = A - U$	$C = B/U * 100$	
1	Chocolate 16:03 5147	291.98	76.44	35.46	
2	Chocolate 16:03 5147	290.80	75.95	35.35	
3	Chocolate 16:03 5147	291.58	75.75	35.09	35.30
1	Strawberry 5182 16:46	312.50	83.29	36.34	
2	Strawberry 5182 16:46	307.80	79.28	34.69	
3	Strawberry 5182 16:46	311.30	79.73	34.43	35.15
1	Vanilla 15:32 5148	294.80	71.70	32.14	
2	Vanilla 15:32 5148	297.52	73.20	32.63	
3	Vanilla 15:32 5148	300.34	74.20	32.81	32.53

Appendix 5: Data to Determine Blended Overrun for Products with Low Overrun.

Water shots total: 87.0 g (3 Oz)

Temperature: 5F

Cup #	Test Sample	Unfrozen Mix Volume per cup (mL) Variable U (calculated)	Full Cup of Water (g) Variable V	Total Weight Before Blend (g) Variable X	Total Weight after Blend (g) Variable Y	Blended product water added to headspace (g) Variable Z	
22	Chocolate 5182 21:20	221.27	480.00	249.15	282.00	188.00	2 cycles
23	Chocolate 5182 21:20	225.70	480.00	254.14	279.60	198.20	2 cycles
24	Chocolate 5182 21:20	228.01	480.00	256.74	332.40	123.80	Full blend
25	Chocolate 21:24 5294	228.93	480.00	257.78	334.30	118.40	Full blend
2	Chocolate no code	214.85	480.00	241.92	277.80	195.60	3 1/2 cycles
3	Chocolate no code	215.83	480.00	243.03	DIDN'T BLEND		3 1/2 cycles
27	Vanilla 5902 19:22	223.54	480.00	250.36	291.10	179.60	3 1/2 cycles
28	Vanilla 5902 19:22	224.24	480.00	251.15	289.60	184.10	3 1/2 cycles
29	Vanilla 5902 19:22	223.86	480.00	250.72	285.20	187.70	3 1/2 cycles
30	Vanilla 5902 19:22	223.30	480.00	250.10	288.70	186.80	2 cycles
31	Vanilla 5902 19:21	223.95	480.00	250.82	289.30	181.70	2 cycles
32	Vanilla 5902 19:22	222.92	480.00	249.67	285.20	185.80	2 cycles
33	Vanilla 5902 19:20	218.44	480.00	244.65	322.00	125.80	Full blend
34	Vanilla 5902 19:20	221.13	480.00	247.66	326.10	122.70	Full blend
35	Vanilla 5902 19:20	222.30	480.00	248.98	326.70	120.00	Full blend

Appendix 6: Formula to Determine Blended Overrun for Products with Low Overrun.

Cup #	Test Sample	Water Shot Volume (mL)	Product Volume (mL)	Air added during blending (mL)	% Overrun		AVG OVERRUN
	Formula	D = Y - X	N = V - Z	E = N - (U + D)	E/U*100		
22	Chocolate 5182 21:20	32.85	292.00	37.88	17.12	2 cycles	15.35
23	Chocolate 5182 21:20	25.46	281.80	30.64	13.57	2 cycles	
24	Chocolate 5182 21:20	75.66	356.20	52.53	23.04	Full blend	23.78
25	Chocolate 21:24 5294	76.52	361.60	56.15	24.52	Full blend	
2	Chocolate no code	35.88	284.40	33.67	15.67	3 1/2 cycles	15.67
3	Chocolate no code	DIDN'T BLEND				3 1/2 cycles	
27	Vanilla 5902 19:22	40.74	300.40	36.12	16.16	3 1/2 cycles	15.38
28	Vanilla 5902 19:22	38.45	295.90	33.21	14.81	3 1/2 cycles	
29	Vanilla 5902 19:22	34.48	292.30	33.96	15.17	3 1/2 cycles	
30	Vanilla 5902 19:22	38.60	293.20	31.30	14.02	2 cycles	15.36
31	Vanilla 5902 19:21	38.48	298.30	35.87	16.02	2 cycles	
32	Vanilla 5902 19:22	35.53	294.20	35.75	16.04	2 cycles	
33	Vanilla 5902 19:20	77.35	354.20	58.41	26.74	Full blend	26.61
34	Vanilla 5902 19:20	78.44	357.30	57.74	26.11	Full blend	
35	Vanilla 5902 19:20	77.72	360.00	59.98	26.98	Full blend	

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Determination of Overrun in Pre-blend and Blended Product

Rev.	ECO No.	Date	Originator Name & Signature	Description of Change
01		17SEP15		Initial Release

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1. PURPOSE:

This document describes the test procedures to determine the percent overrun added to product during freezing and/or from blending.

2. SCOPE:

This protocol applies to the Hamilton Beach MIC 2000 blender system using Hershey's Ice Cream Milkshake products.

3. REFERENCE DOCUMENTS:

- 3.1. Omega HH147U User's Guide
- 3.2. Hamilton Beach MIC2000 Operator's Manual
- 3.3. Information derived from store visit(s) with the Hershey's Shake Shop Express program

4. EQUIPMENT / TOOLS / MATERIALS:

- 4.1. Scale, (add make and model, calibration dates if any)
- 4.2. Dry ice
- 4.3. Graduated cylinder, xx cc
- 4.4. Protective gloves (insulated)
- 4.5. Cold water
- 4.6. Test product samples
- 4.7. Beaker, xx cc
- 4.8. Insulated foam shipper (size?)
- 4.9. Sharpie marker
- 4.10. Press 'n Seal plastic wrap
- 4.11. Thermocouple reader and datalogger, Omega HH147U
- 4.12. Hamilton Beach blender, MIC 2000 s/n: A1241L
- 4.13. Samples of Hershey's milkshake products (specify flavors)

5. PREPARATION:

- 5.1. Water shot volume should be measured prior to the start of blend.
- 5.2. Ensure the blender is set up to manufacturer's default setting so it is representative of a typical blender in the field.
- 5.3. Use one thermocouple to measure the ambient lab temperature and record data.
- 5.4. Use one thermocouple to measure the temperature of the water shot.
- 5.5. Use one thermocouple to measure the temperature of the product prior to blending.
- 5.6. Temper product to be tested at 12F for at least 8 hours or overnight before starting test.
- 5.7. Number test samples on the side of the cup with a Sharpie.
- 5.8. Test only products without inclusions.
- 5.9. Fill up an insulated foam shipper 2/3 full with dry ice (Source: Atlas Welding, 1224 6th Street, Berkeley, CA).

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6. TEST PREPARATION:

- 6.1. Place an empty graduated cylinder on the scale and tare the scale.
- 6.2. Weigh unfrozen flavored mix up to the target cup fill weight in the graduated cylinder.
- 6.3. Record the content in mL (U).
- 6.4. Place an empty sample cup on the scale and tare the scale.
- 6.5. Pour water in the cup to fill the cup all the way to the brim. Record the weight and take a visual reference of the level of the fill (V).
- 6.6. Carefully remove cup from the scale and discard the water.
- 6.7. Record all information in data collection worksheets in appendix A.

7. MEASUREMENT PROCEDURE (OVERRUN IN PRE-BLENDED PRODUCT):

- 7.1. Use **caution** when handling dry ice and wear protective gloves. Prepare a container with dry ice.
- 7.2. Temper an unblended cup in the box of dry ice for 1 hour.
- 7.3. Remove the lid. Place on the scale and tare.
- 7.4. Carefully pour ice cold water into cup to the brim referencing the level the water was at in the Test Preparation step 6.5. Record the weight of added water (W).
- 7.5. Discard water.
- 7.6. Sample can be saved in the freezer and used to determine blended product volume.
- 7.7. Repeat step 7.2 thru 7.6 for additional samples.

8. MEASUREMENT PROCEDURE (OVERRUN IN BLENDED PRODUCT):

- 8.1. Use **caution** when handling dry ice. Prepare container with dry ice near blender for easy access. Wearing protective gloves, dig a hole in the dry ice big enough to insert a cup.
- 8.2. Tare the scale, then take one cup at a time out of the freezer, remove lid and place on a scale.
- 8.3. Record sample number and total weight (X).
- 8.4. Place cup in Hamilton Beach MIC 2000 cup holder and initiate blend.
- 8.5. Remove the blended cup once the blend cycle is complete being careful not to disturb the contents.
- 8.6. Cut a piece of plastic wrap and loosely cover the top of the cup (see example below) and place in dry ice. Try not to disturb or touch the contents of the cup during this step.
- 8.7. Surround cup with dry ice. Be careful not to let dry ice fall in over the top and into the product.
- 8.8. Repeat steps 8.2 thru 8.7 until there is no more room in the dry ice container to fit any more cups.
- 8.9. Cover container and let cups sit undisturbed for about 45 minutes or until cups are frozen solid.
- 8.10. After 45 minutes, tare scale.
- 8.11. Remove lid of container of dry ice. Carefully lift one of the cups, remove plastic wrap covering and place on the scale, Record total weight (Y).
- 8.12. Tare the scale again with the up on top.
- 8.13. Slowly pour ice cold water over the frozen product. Fill to the brim remembering the level of the water in Testing Prep step 6.5.
- 8.14. Record weight of water added to the cup (Z).
- 8.15. Carefully remove cup from scale and throw away.
- 8.16. Repeat steps 8.10 thru 8.14 for the rest of the cups in the dry ice box.

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8.17. Repeat all testing steps if necessary for additional samples.

9. CLEAN UP PROCEDURE:

- 9.1. Replace lid on dry ice box and allow dry ice to sublimate.
- 9.2. Discard contents of test samples but clean and save the empty cups.
- 9.3. Wash any utensils and containers.
- 9.4. Wipe down counter and scale if needed from any spills, leaving work area clean.

10. ACCEPTANCE CRITERIA

- 10.1. None

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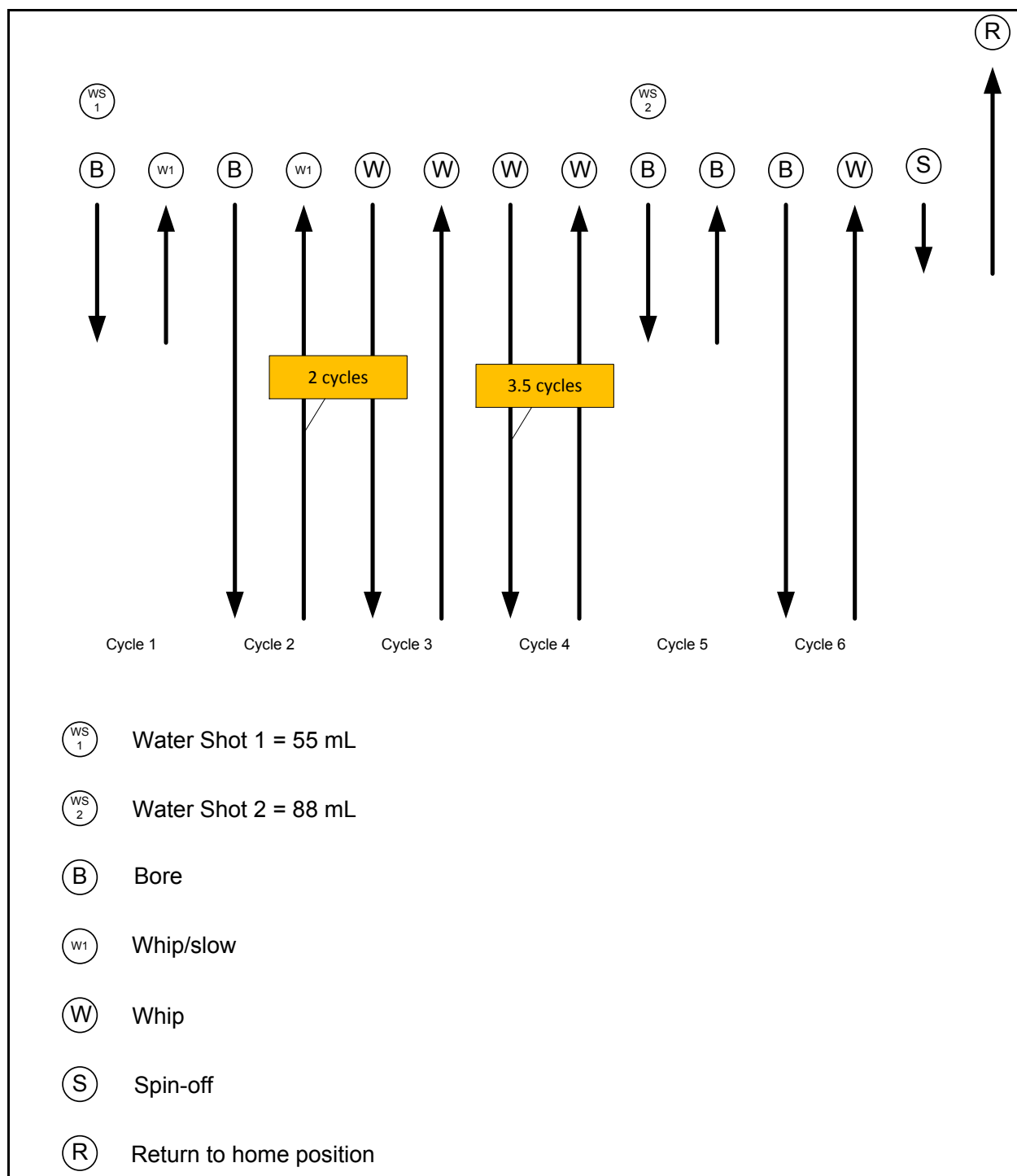
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APPENDIX B: HAMILTON BEACH MIC 2000 BLEND PROFILE:



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APPENDIX C: TEST SEQUENCE:

1. Reference Blend with Hershey's Milkshake Product
 - 1.1. Choose a product with no inclusions (plain milkshake preferable).
 - 1.2. Measure overrun pre-blend per procedures outlined in this protocol.
 - 1.3. Record data.
 - 1.4. Measure overrun post-blend per procedures outlined in this protocol.
 - 1.5. Blender should be set to 1A mode interruption.
 - 1.6. Allow blender to complete full blend cycle without.
 - 1.7. Measure over-run per procedures outlined in this protocol.
 - 1.8. Record data.
2. Aeration study with no initial over-run
 - 2.1. Choose product with no inclusions (plain milkshake preferable).
 - 2.2. Thaw product completely and allow the trapped air to escape from liquid product.
 - 2.3. Re-freeze product thoroughly.
 - 2.4. Measure over-run and record data.
 - 2.5. Blend product (1A mode) per normal blend cycle.
 - 2.6. Measure over-run and record data.
3. Aeration Study at Different Blend Phases (2nd Cycle)
 - 3.1. Choose product with no inclusions (plain milkshake preferable).
 - 3.2. Start blend but turn off blender (use power switch) at the end of the 2nd blend cycle.
 - 3.3. Remove product and follow procedures to measure over-run.
 - 3.4. Record data.
4. Aeration Study at Different Blend Phases (3 1/2 Cycles)
 - 4.1. Choose product with no inclusions (plain milkshake preferable).
 - 4.2. Start blend but turn off blender (use power switch) at the end of the 3 1/2 blend cycle.
 - 4.3. Remove product and follow procedures to measure over-run.
 - 4.4. Record data.

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CERTIFICATE OF SERVICE

I hereby certify that on August 24, 2018, copies of the foregoing were caused to be served upon the following in the manner indicated:

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
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EXHIBIT B

11/15/02

11-18-02

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

INVENTOR(S)					
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James J.		Farrell		25 Van Tassel Lane, Orinda, California 94563	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
RINSEABLE SPLASH SHIELD					
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City		San Francisco	State	CA	ZIP 94105
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages 1		<input type="checkbox"/> CD(s), Number _____			
<input type="checkbox"/> Drawing(s) Number of Sheets _____		<input type="checkbox"/> Other (specify) _____			
<input type="checkbox"/> Application Data Sheet See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.		FILING FEE AMOUNT (\$)			
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees		<div style="border: 1px solid black; padding: 5px; width: fit-content;">\$80.00</div>			
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number 50-1703					
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are _____					

Respectfully submitted,

SIGNATURE *Kathleen A. Frost*Date **11/15/2002**TYPED or PRINTED NAME **Kathleen A. Frost**REGISTRATION NO. **37,326**TELEPHONE **(415) 512-1312**Docket Number: **FRLL-700**

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C.

P19SMALL/REV05

P06A/REV02

Express Mail Label No.: EV154362076US

Patent Disclosure

Rinseable Splash Shield

This invention is a rinseable splash shield for use in shielding splashes from a mixing container. The shield may be used on mixers such as those described in U.S. Patent Nos. 6,474,862, 6,326,047 and 5,803,377 as well as various other mixers.

Nielson 5328263 discloses a lid placement mechanism, but does not provide for rinsing of the lid between milkshakes. Milkshake material that clings to the lid at the end of a milkshake melts after the milkshake container below has been removed, and the drips land on the container mounting mechanism below. In addition, this material can be transferred into the next milkshake run on the mixer, with undesirable results.

The object of this invention is to enable the rinsing of the lid between milkshakes by directing a water spray at the shield. Results are better when multiple nozzles are used.

Another very helpful approach is to spin the shield as the water is directed at it. This has the benefit of exposing the entire shield to the water shot, as well to fling the water off at the end of the rinse operation.

The shield can also be held down by a spring to ensure a tight seal, and to secure the cup it is in contact with into the holder holding the cup.

Another approach to this is to use a heavy weight to hold the shield and cup in place.

The shield is placed so that it travels up with the cup as the cup moves up past the mixing blade around which the shield is placed.

By providing a tapered section on the shaft that meets tapered ribs on the interior of the shield when the shield is lowered, the shield can be held in place as the cup drops away from it. This gives the added advantage that when the shaft is spun when the shield is seated on the tapered section, the shield is spun with the shaft, aiding in rinsing. When the shield is raised up by the cup, the tapered section of the shield no longer makes contact with the shaft, allowing the shaft to spin freely without spinning the shield.

Express Mail Label No.: EV154362076US

PATENT

-1-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

James J. Farrell

Application No.: NEW

Filed: HEREWITH

For: RINSEABLE SPLASH SHIELD

Group No.: Unknown

Examiner: Unknown

**SMALL ENTITY STATEMENT
37 CFR 27**

121 Spear Street, Suite 290
San Francisco, CA 94105

Box PROVISIONAL
Commissioner for Patents
Washington, DC 20231

Sir:

Applicant is a small entity.

Respectfully submitted,

STALLMAN & POLLOCK LLP

Date: November 15, 2002

By: Kathleen A. Frost
Kathleen A. Frost (Reg. No. 37,326)

Attorneys for Applicant(s)

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Atty Docket No.: FRLL-700

EXHIBIT C



-1-

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

James J. Farrell

Application No.: 10/715,171

Filed: November 17, 2003

For: RINSEABLE SPLASH SHIELD AND
METHOD OF USE

Confirmation No.: 4079

Group Art Unit: 1723

Examiner: Tony Glen Soohoo

**RESPONSE TO OFFICE ACTION MAILED
OCTOBER 4, 2005**

353 Sacramento Street, Suite 2200
San Francisco, CA 94111
Telephone: (415) 772-4900
Facsimile: (415) 398-2890

M/S PETITION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited
with the United States Postal Service as First Class Mail in an
envelope, addressed to: Commissioner for Patents, P.O.
Box 1450, Alexandria, VA 22313-1450 on April 25, 2006.

STALLMAN & POLLOCK LLP

Dated: 04/25/2006

By:

Tamisha Lawrence-Caceres

Sir:

In response to the Office Action mailed October 4, 2005, and in conjunction with the enclosed
Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37
C.F.R. §1.137(b), please amend the above-identified application as follows:

Amendment to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

04/28/2006 TBESHAH1 00000005 10715171

02 FC:2202

25.00 0P

Atty Docket No.: FRLL-710

Hamilton Beach, Exh. 1007, p. 89

HBBF0051106

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PATENT

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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing contents to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel at an access location in the mixing machine, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, a splash shield positionable over the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the contents of the vessel using the mixing element and with the splash shield covering the opening, separating the splash shield and the vessel; and

directing rinsing fluid onto the splash shield using the nozzle while shielding the access location from the rinsing fluid.

2. (ORIGINAL) The method of claim 1, wherein the directing step is performed automatically after the separating step

3. (CURRENTLY AMENDED) The method of claim 1, wherein the holder is moveable from the access location in a first direction towards the splash shield and a second direction away from the splash shield to the access location and wherein the separating step includes the step of moving the holder in the second direction.

4. (ORIGINAL) The method of claim 3, wherein:

the mixing element is on a shaft;

the splash shield is engageable with a member on the shaft, the splash shield disengageable from the member in response to upward force against the shield, and

mixing is carried out with the splash shield disengaged from the member;

the step of moving the holder in the second direction separates the vessel and splash shield and causes the splash shield to engage with the member on the shaft; and

the method further includes the step of rotating the shaft to rotate the splash shield during the directing step.

5. (ORIGINAL) The method of claim 1, further including the step of rotating the splash shield during the directing step.
6. (ORIGINAL) The method of claim 1, wherein the directing step directs warm water.
7. (ORIGINAL) The method of claim 1, further including the step of directing rinsing fluid onto the mixing element.
8. (ORIGINAL) The method of claim 1, wherein the method includes the steps of:
with the mixing element in the contents of the vessel, causing relative movement of the mixing element and vessel in opposite directions, and
causing the splash shield to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.
9. (ORIGINAL) The method of claim 8, wherein in the causing step the mass of the splash shield retains the vessel within the holder.
10. (CURRENTLY AMENDED) On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including ~~a holder for receiving the vessel and a~~ rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:
a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and
at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield within the rinse chamber.
11. (ORIGINAL) The improvement of claim 10, wherein the mixing machine is further of the type wherein the mixing element is carried by a shaft, and wherein in the improvement the splash shield is carried by the shaft.
12. (ORIGINAL) The improvement of claim 11, wherein the improvement further includes means for moving the holder in a first direction towards the splash shield to move the vessel into contact

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with the splash shield and in a second direction away from the splash shield to separate the vessel from the splash shield.

13. (ORIGINAL) The improvement of claim 12, wherein the splash shield is engageable with a member on the shaft and is disengageable from the member in response to upward force by the vessel against the splash shield.

14. (ORIGINAL) The improvement of claim 13, wherein the shaft is rotatable to rotate the splash shield as rinse fluid is directed onto the splash shield by the nozzle.

15. (ORIGINAL) The improvement of claim 10, wherein the at least one nozzle is oriented to direct rinse fluid onto the mixing element.

16. (ORIGINAL) The improvement of claim 12, wherein the splash shield is of sufficient mass to remain in position covering the opening of the vessel during movement of the holder in the second direction until it engages with the member.

17. (ORIGINAL) The improvement of claim 10, wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.

Claims 18 – 20 are canceled.

21. (ORIGINAL) The method of claim 1, wherein the directing step directs a rinse solution comprising sanitizing solution.

22. (ORIGINAL) The method of claim 21, wherein the sanitizing solution includes a quaternary ammonium sanitizer solution.

23. (CURRENTLY AMENDED) On a mixing machine of a type having a rotatable mixing element extendable into a vessel for mixing the contents of the vessel, the improvement comprising:
 a splash shield carried by the mixing machine, the splash shield positionable to shield the opening of the vessel,
 a source of rinse fluid; [[and]]

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at least one nozzle coupled to the source of rinse fluid and oriented to direct rinse fluid onto the splash shield; and

an access location in the mixing machine, the vessel positionable at the access location in preparation for mixing of the vessel contents and retrievable from the access location following mixing; and

a barrier moveably positioned to shield the access location from rinse fluid.

24. (ORIGINAL) The improvement of claim 23, wherein the source of rinse fluid comprises sanitizing solution.

25. (ORIGINAL) The improvement of claim 24, wherein the sanitizing solution includes a quaternary ammonium sanitizer solution.

26. (NEW) The method of claim 1 wherein:
the mixing machine further includes a rinse chamber having an entrance and a door,
during the rinsing step the splash shield is positioned within the rinse chamber; and
wherein the shielding step includes moving the door to a closed position to enclose the splash shield within the rinse chamber.

27. (NEW) The method of claim 26 wherein the door defines a flow path and wherein the method includes causing rinse water falling from the splash shield to flow along the flow path to a drain..

28. (NEW) The method of claim 26 wherein the separating step includes the step of moving the holder in a first direction to move the opening of the vessel from a first position within the rinse chamber to a second position at the access location.

29. (NEW) The improvement of claim 10, wherein:
the improvement further includes a holder proportioned to receive the vessel and moveable in a first direction to carry at least the opening of the vessel through the entrance into the rinse chamber and into contact with the splash shield, and moveable in a second direction to separate the opening of the vessel from the splash shield.

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REMARKS

Claims 1-17 are currently pending. By this amendment, Claims 18 – 20 are canceled, Claims 1, 3, 10 and 23 are amended, and Claims 26 – 29 are newly added.

I. Double Patenting

In response to the provisional double patent rejection based on Application No. 11/116,497, Applicant encloses a terminal disclaimer.

II. Election/Restriction

Applicant confirms the election of Claims 1 – 17 and 21-25 made via telephone. Claims 18 – 20 have been canceled and resubmitted in a divisional application.

III. Claim Rejections Under 35 USC § 103

All claims have been rejected as obvious in view of the prior art. In particular:

Claims 1-3, 5-10, 21-22 and 23-25 have been rejected as being unpatentable over Nielson U.S. 5,439,289 in view of Levine U.S. 4,637,221. The Office Action cites Nielson as teaching all of the subject matter of the claims “except for the teaching of having a nozzle and a corresponding method whereby the nozzle is directed to rinse the splash shield lid cover.” Levine is cited as teaching a mixing device having an “integrated automatic spray head which may be used to spray and clean the surfaces of the mixer element and mixing vessel which has food debris such that it is ready for a subsequent use.” Although Levine does not describe using a spray head to spray a splash shield, the Office Action states that it would be obvious from the teachings of Levine to modify Nielson to provide a spray head directed at “any and all surfaces of the mixing chamber in which residual food may reside, including the lid 16 of Nielson”

Claims 4 and 11 – 17 have been rejected as unpatentable over Nielson in view of Levine, and further in view of Harr U.S. 1,090,148. The Office Action cites Harr as teaching “a lid 21 which is movable mounted upon a shaft by a spring 22 such that it may be disengaged from a lower position shaft member position in order to bias the lid.”

Claim 1 as amended recites that the mixing machine has a holder for receiving the vessel at an access location in the mixing machine, and the step of directing rinsing fluid onto the splash shield using the nozzle while shielding the access location from the rinsing fluid. In one example of an embodiment described in Applicant’s specification, the rinsing occurs in a rinse chamber that is shielded from the location from which the user retrieves the cup 14 from the cup holder 16. This allows thorough rinsing of the splash shield and/or other components (e.g. the shaft and/or the mixing element) without creating a

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-7-

mess in the portion of the machine that is accessed by a user preparing a drink. The features of Claim 1 carry through to Claims 2 – 9, 21, 22 and 26 - 28 which are dependent on Claim 1.

The Nielson reference does not include any teachings concerning rinsing of the splash shield. For this reason, Nielson does not teach the step of directing rinsing fluid onto the splash shield using the nozzle while shielding the access location from the rinsing fluid as recited in Claim 1. This step is likewise missing from Levine. According to Levine's method, ice cream and condiments are scooped into a funnel 21. The mixer 26 passes into the funnel 21, mixing the contents and pushing the contents into a cup in holder 42. Afterwards, the spray nozzle 40 sprays rinse fluid onto the mixer 26. The fluid flows into the funnel 21 thereby rinsing the funnel 21, and then passing to the cup holder 42 which is disposed in a sink 43 having a drain. In the Levine machine the rinse fluid flows through a funnel 21 that is oriented in longitudinal and axial alignment with the cup holder 42 that is mounted in the sink 43 that receives spent wash water. Thus the rinse water is specifically and purposefully directed to pass through the cup holder 42 on the way to the sink 43, rather than being shielded from it. Since Levine does not provide the teachings missing from Neilson, Claims 1– 9, 21, 22 and 26 - 28 are patentable over the cited references.

Claim 10, as amended, recites a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance. The cited references do not disclose such a feature, nor is there a fair suggestion for modifying the references to include this feature. Thus, Claims 10-17 and 29 are allowable.

Claim 23 as amended recites an access location in the mixing machine, the vessel positionable at the access location in preparation for mixing of the vessel contents and retrievable from the access location following mixing; and a barrier moveably positioned to shield the access location from rinse fluid. Claims 24 – 25 are dependent on Claim 23 and thus also include these features. For reasons set forth above, these features are absent from the cited references, and there is no fair suggestion for modifications to the cited references to include these features.

Respectfully submitted,

STALLMAN & POLLOCK LLP

Dated: April 25, 2006

By: Kathleen A. Frost
Kathleen A. Frost
Reg. No. 37,326

Attorneys for Applicant(s)

Atty Docket No.: FRLL-710

EXHIBIT D



PATENT

-1-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	Group Art Unit: 3209
JAMES J. FARRELL	)	Examiner: HUSAR, J.
Appln. No. 08/794,859	)	RESPONSE TO OFFICE
Filed: February 5, 1997	)	ACTION MAILED
For: APPARATUS FOR MAKING	)	<u>SEPTEMBER 2, 1997</u>
FROZEN DRINKS (As Amended))	
		2001 Ferry Building
		San Francisco, CA 94111
		(415) 433-4150

Assistant Commissioner for
Patents
Washington, D.C. 20231

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on February 2, 1998.

LIMBACH & LIMBACH L.L.P.

Date: February 2, 1998

By: Beryl Anne Keys
Name: Beryl Anne Keys

Sir:

Applicant makes the following amendments and remarks in response to the Official Action mailed September 2, 1997:

In the Title:

Please amend the title to read: APPARATUS [AND METHOD] FOR MAKING FROZEN DRINKS

In The Claims:

Please cancel Claims 13, 16, 21, 22, 25, 26, 28 and 30.

Please amend Claims 11, 12, 14, 15, 17 - 20, 23, 24, 27, 29 and 31 as follows:

11: (AMENDED) An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:

PATENT

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a housing;

a cup support mounted to the housing;

a liquid dispenser having an outlet positioned to direct liquid into a cup positioned in the cup support;

grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance; and

aeration means for, when a cup containing a frozen [ground or liquid] substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground [or liquid] substance formed by the grinding means and the liquid dispensed by the liquid dispenser.

B1
amended

²_{12.} (AMENDED) The apparatus of claim ¹~~11~~ wherein the grinding and aeration means comprise a rotatable blade assembly mounted within the housing for extension into a cup positioned in the cup support.

³_{14.} (AMENDED) The apparatus of claim ²~~12~~ wherein the blade assembly includes a blade member mounted on a shaft, the blade member including first regions lying within a plane and [further includes] spaced apart regions at least partially outside [elevated above] the plane such that during rotation of the blade member in a fluid, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect.

B2

⁸_{15.} (AMENDED) The apparatus of claim ¹~~11~~ wherein:

26

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-3-

the grinding means includes a first blade mounted within the housing for extension into a cup positioned in the cup support;

the [apparatus further comprises a] liquid dispenser includes [having] a vessel and the [an] outlet is positioned to direct liquid from the vessel into a cup positioned in the cup support; and

the aeration means includes a second rotatable blade extending into the vessel.

¹²
~~17.~~ (AMENDED) The apparatus of claim ¹¹~~27~~ [16] characterized further in that the blade assembly includes [said blade has] at least one [a first] surface area shaped to [grind frozen material from the frozen substance in a cup in response to rotation of the blade as the blade moves toward the bottom of the cup and at least a second surface area shaped to] pump fluid toward the bottom of the cup in response to rotation of the blade assembly.

¹³
~~18.~~ (AMENDED) The apparatus of claim ¹¹~~27~~ [16] wherein the blade assembly shaving elements and aeration elements are in close vertical proximity to one another [grinding means include grating elements formed in the blade].

¹⁴
~~19.~~ (AMENDED) The apparatus of claim ¹¹~~27~~ [16] wherein the aeration elements include [means includes] first regions lying within a plane and [further includes] spaced apart regions at least partially outside [elevated above] the plane such that during rotation of the blade assembly in a fluid the aeration elements cause alternately high and low pressure zones in the fluid, and thus create turbulent eddies which cause a whipping effect..

PATENT

-4-

11

¹⁵
20. (AMENDED) The apparatus of claim ¹¹~~27~~ [16] further comprising:

a rod mounted within the housing;

a carriage slidable on the rod between upper and lower carriage positions corresponding to the upper and lower blade positions, the rotatable blade assembly being carried by the carriage; [, and the]

a first motor [being] coupled to the carriage for movement of the carriage between [the] upper and lower positions corresponding to the upper and lower blade positions.

²¹
23. (AMENDED) The apparatus of claim ²⁰~~41~~ [16] wherein:

the apparatus further includes control means for generating slidable blade shaft [carriage] movement control signals and blade rotation control signals [and for delivering the control signals to the first and second motors;], the first motor [is] responsive to the slidable blade shaft [carriage] movement control signals to move the [carriage] slidable blade shaft between the upper and lower positions; and

a [the] second motor responsive [is response] to the blade rotation control signals to rotate the blade assembly.

²²
24. (AMENDED) The apparatus of claim ²¹~~23~~ wherein:

the apparatus further comprises an initiation switch and a cup sensor for detecting the presence of a cup in the cup support and for producing an output; and

the control means is further for generating the blade [carriage] movement control signals and the blade rotation control signals in response to activation of the initiation switch and the output of the cup sensor to allow the blade assembly to rotate and to be lowered

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-5-

B4
amended

into a cup when a cup is detected in the cup support and when a user activates the initiation switch.

B5

11
27.

An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:

a housing;

a cup support mounted to the housing;

a rotatable blade assembly mounted within the housing, the blade assembly including shaving elements and aeration elements, the blade assembly moveable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom [grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance]; and

a liquid dispenser having [a vessel and] an outlet positioned to direct liquid [from the vessel] into a cup positioned in the cup support[; and

aeration means for incorporating air into the liquid in the vessel].

B6

16
29.

(AMENDED) The apparatus of claim 27 [28] wherein the grating [grading] elements include [holes formed in the blade and] depressed [trailing] edges formed adjacent openings in the blade assembly [the holes].

B7

17
31.

(AMENDED) The apparatus of claim 27 wherein the blade assembly includes an upper surface and wherein the apparatus further comprises means for, when the blade assembly is immersed

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-6-

B7
could

and rotated in a cup containing liquid, directing liquid from above [over] the upper surface of the blade assembly to below the blade assembly [and for driving liquid from the upper surface into the cup].

[

Please add new claims 33 - 46:

B8

⁴
33. (NEW) The apparatus of claim ²~~12~~ wherein the blade assembly is moveable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom, and wherein the apparatus further includes control means for causing the blade assembly to move between the upper and lower blade positions at least twice.

⁵
34. (NEW) The apparatus of claim ²~~12~~ further comprising:
a cup sensor for detecting the size of a cup in the cup support and for producing an output corresponding to the size of the cup;
and

control means responsive to the output of the cup sensor for generating blade rotation speed and vertical blade positioning control signals which correspond to the size of the cup detected by the cup sensor, the blade assembly being responsive to the blade rotation speed and vertical blade positioning control signals.

⁹
35. (NEW) The apparatus of claim ¹~~11~~ further comprising:
a cup sensor for detecting a characteristic of a cup in the cup support and for producing an output corresponding to the characteristic of the cup; and

control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the

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cup sensor, the liquid dispenser being responsive to the liquid dispensing control signals to dispense liquid into the cup.

¹⁰
~~36~~. (NEW) The apparatus of claim ⁹~~35~~ wherein the characteristic is the size of the cup and wherein the liquid dispenser is responsive to the liquid dispensing control signals to dispense a volume of liquid which corresponds to size of the cup.

⁶
~~37~~. (NEW) The apparatus of claim ²~~12~~ further comprising:
 an initiation switch;
 a cup sensor for detecting the presence of a cup in the cup support and for producing an output;
 control means for generating up and down blade movement control signals and blade rotation control signals;
 a slidable and rotatable shaft attached to the blade assembly and moveable between upper and lower positions corresponding to upper and lower blade positions;
 first and second motors coupled to the shaft, the first motor responsive to the blade movement control signals to move the shaft between the upper and lower positions, the second motor responsive to the blade rotation control signals to rotate the blade assembly, the control means responsive to activation of the initiation switch and to output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.

⁷
~~38~~. (NEW) The apparatus of claim ²~~12~~ wherein the apparatus is for making a frozen drink having a top surface and wherein:

B 8
 cont

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-8-

the blade assembly is moveable between upper and lower blade positions; and

the control means is further for generating blade speed control signals to reduce the rotational speed of the blade assembly when the blade assembly is moved to a first level and to increase the rotational speed of the blade assembly when the blade assembly is moved to a second level, the first level corresponding to a level beneath the top surface of a frozen drink in a cup positioned in the cup support, and the second level corresponding to a level above said top surface.

18 11
39. (NEW) The apparatus of claim 27 wherein the apparatus further includes control means for causing the blade assembly to move between the upper and lower blade positions at least twice.

19 11
40. (NEW) The apparatus of claim 27 further including:
an initiation switch configured to produce an output when activated by a user;

a cup sensor for detecting the presence of a cup in the cup support and for producing an output;

control means responsive to activation of the initiation switch and to the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch

20 11
41. (NEW) The apparatus of claim 27 further comprising:
a threaded guide rod mounted within the housing;

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PATENT

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a slidable and rotatable blade shaft having the blade assembly attached thereto, the blade shaft drivable between upper and lower positions by rotation of the threaded guide rod; and

a first motor coupled to the threaded rod for driving the slidable and rotatable blade shaft between upper and lower positions corresponding to the upper and lower blade positions.

23

11

42. (NEW) The apparatus of claim 21 wherein the apparatus is for making a frozen drink having a top surface and wherein the apparatus includes:

a cup sensor for detecting the presence of a cup in the cup support and for producing an output; and

control means for generating blade speed control signals to reduce the rotational speed of the blade assembly when the blade assembly is moved to a first level and to increase the rotational speed of the blade assembly when the blade assembly is moved to a second level, the first level corresponding to a level beneath the top surface of a frozen drink in a cup positioned in the cup support, and the second level corresponding to a level above said top surface.

24

11

43. (NEW) The apparatus of claim 21 further comprising:

a cup sensor for detecting the size of a cup in the cup support and for producing an output corresponding to the size of the cup; and

control means responsive to the output of the cup sensor for generating blade rotation speed and vertical blade positioning control signals which correspond to the size of the cup detected by the cup sensor, the blade assembly being responsive to the blade rotation speed and vertical blade positioning control signals..

33

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44. (NEW) The apparatus of claim 27, further comprising:

a cup sensor for detecting a characteristic of a cup in the cup support and for producing an output corresponding to the characteristic of the cup; and

control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispenser being responsive to the liquid dispensing control signals.

26

25

45. (NEW) The apparatus of claim 44 wherein the characteristic is the size of the cup and wherein the liquid dispenser is responsive to the liquid dispensing control signals to dispense a predetermined volume of liquid corresponding to the size of the cup.

B8
Amended

27

46. (NEW) An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:

a housing;

a cup support mounted to the housing;

a liquid dispenser having an outlet positioned to direct a predetermined volume of liquid into a cup positioned in the cup support;

a shaft mounted to the housing, the shaft carrying a rotatable blade having shaving elements and aeration elements formed thereon, the shaft moveable relative to the housing to carry the blade between an upper blade position remote from the cup support and a lower blade position adjacent to the cup support, the blade configured to, when it is lowered into a cup containing frozen substance, shave the frozen substance, mix the frozen substance with liquid dispensed by the liquid dispenser, and incorporate air into the formed mixture of frozen substance and liquid.--

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REMARKS

Claims 13, 16, 21, 22, 25, 26, 28 and 30 have been cancelled. Claims 11, 12, 14, 15, 17 - 20, 23, 24, 27, 29 and 31 have been amended. New Claims 33 - 46 have been added. Claims 11, 12, 14, 15, 17 - 20, 23, 24, 27, 29, 31 and 33 - 46 are pending.

In the Claims as now written, there are three independent claims: Claim 11, Claim 27 and Claim 46. Claims 12, 14, 15, and 33 - 38 are dependent from Claim 11. Claims 17 - 20, 23 - 24, 29, 31 and 39 - 45 are dependent from Claim 27. No claims depend from Claim 46.

The present invention is an apparatus used to make frozen drinks from a frozen substance which has been frozen into a cup. During use, a cup containing a frozen substance is positioned in a cup support located in the frozen drink machine. A rotatable blade is lowered into the cup, shaving or grinding the frozen substance into particles. A liquid such as milk or water is introduced into the cup and mixed together with the small particles. The apparatus is a great improvement over prior art apparatuses such as that described in Tomlinson et al because it whips or incorporates air into the mixture of ground frozen substance and liquid in the cup, thereby substantially improving flavor delivery and minimizing ingredient costs.

I. **Rejections Under 35 U.S.C. § 112**

In response to the rejection of the claims as being vague and indefinite, Claim 11 has been amended to recite "aeration means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground

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substance formed by the grinding means and the liquid dispensed by the liquid dispenser." The rejection is believed overcome by this amendment.

II. Prior Art Rejections

Claims 11 through 31 have been rejected as being anticipated by Tomlinson et al.

Applicant submits that Claims 11 - 15 are allowable over Tomlinson because Tomlinson fails to disclose or fairly suggest aeration means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser. Likewise, Claims 27 and 17 - 26, 28 - 31 and 37 - 46 are patentable over Tomlinson et al because the reference fails to disclose or fairly suggest a rotatable blade including both shaving elements and aeration elements.

Tomlinson et al describes a shaft having a number of blades and sets forth the functions performed by the various blades. As understood by Applicant, cutter blades 38 shave the frozen substance; mixing blades 41, 43 mix the milk in the container with the shaved frozen material; and blades 44 prevent the liquid from splashing out of the cup.

None of the Tomlinson et al blades are described as causing air to be incorporated/whipped into the ground frozen substance, nor is any other form of aeration means described. For this reason, the claims are allowable over the cited art.

III. New Claims

New Claims 33 - 46 have been added which are also believed to distinguish over Tomlinson. Claims 33 - 38 are dependent on

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Claim 11 and Claims 39 - 45 are dependent on Claim 27 and thus are patentable for the reasons set forth above. Claim 46 recites a rotatable blade having shaving elements and aeration elements formed thereon and thus is also patentable over Tomlinson et al.

In addition, many of the new claims recite sensors (Claims 34, 35, 37, 40, 42 - 45) and control means (Claims 33 - 40 and 42 - 45) that are neither taught nor suggested by the prior art. Allowance of the new claims is therefore respectfully requested.

IV. Conclusion

In view of the forgoing, Claims 11, 12, 14, 15, 17 - 20, 23, 24, 27, 29, 31 and 33 - 46 are in condition for allowance. Early consideration and allowance of the claims is therefore respectfully requested.

Respectfully submitted,
LIMBACH & LIMBACH L.L.P.

Dated: 2-2-98

By: Kathleen A. Frost
Kathleen A. Frost
Reg. No. 37,326

Attorneys for Applicant(s)

Atty Docket No. FRLL-110

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' OPPOSITION TO DEFENDANTS'
MOTION IN LIMINE NO. 2 TO PRECLUDE DOCTRINE OF EQUIVALENTS**

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Attorneys for Plaintiff

April 2, 2019

Plaintiffs oppose Defendants' Motion *in Limine* No. 2 to summarily adjudicate multiple issues concerning the doctrine of equivalents (DOE) in a cursory evidentiary motion.

The doctrine of equivalents was created by the courts to prevent unscrupulous copyists from successfully arguing that petty, insubstantial changes to a patented invention are enough to avoid infringement. *See Graver Mfg. Co. v. Linde Co.*, 339 U.S. 607 (1949). Under the DOE, "if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape." *Id.* at 608.

In this case, as more fully explained in Plaintiffs' summary judgment briefs (D.I. 170, D.I. 199, D.I. 218), Defendants have repeatedly incorporated f'real's patented inventions in their infringing blenders. Plaintiffs believe the claimed differences that Defendants rely on for their non-infringement defenses are petty and insubstantial. As explained in Dr. Maynes's opening report, Plaintiffs believe that all the asserted claims are literally infringed (in which case DOE is not needed). Nonetheless, to the extent Defendants continue to rely on petty and insubstantial differences for their non-infringement defenses, DOE allows the trier of fact to look beyond these petty and insubstantial differences and fairly consider the substance of f'real's inventions.

Dr. Maynes's Opinions. Defendants first criticize Dr. Maynes for providing conclusory DOE opinions in his opening expert report. As more fully explained in Plaintiffs' Motion *in Limine* No. 3 (PTO Ex. 15), Defendants have only themselves to blame for any alleged deficiencies in Dr. Maynes's initial DOE opinions because Defendants failed to provide any meaningful response to Plaintiffs' infringement contention interrogatories during discovery (*see* PTO Ex. 15 at Ex. A, pp. 14-15). Because of Defendants' insufficient disclosures, Plaintiffs and Dr. Maynes were left to guess what Defendants' non-infringement defenses might be when Dr. Maynes's opening report was due. When Defendants belatedly disclosed their non-infringement

contentions in Dr. Slocum's rebuttal report and Defendants' summary judgment motion, Dr. Maynes responded by providing details concerning his DOE contentions (*see* D.I. 198, Maynes Decl., ¶¶ 41, 45).¹ Defendants' failure to provide timely non-infringement contentions during discovery should not be a basis to exclude Dr. Maynes's expert testimony at trial.

Prosecution History Estoppel. The doctrine of prosecution history estoppel prevents a patent owner from recapturing subject matter with DOE that was intentionally surrendered during the process of obtaining a patent. *See Festo Corp. v. Kabushiki Co.*, 535 U.S. 722 (2002). "To determine whether prosecution history estoppel applies in a given case, the trial court tasked with this assessment 'must look to the specifics of the amendment and the rejection that provoked the amendment to determine whether estoppel precludes the particular doctrine of equivalents argument being made.'" *Pfizer Inc. v. Teva Pharms. USA, Inc.*, 882 F. Supp. 2d 643, 712 (D. Del. 2012), quoting *Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1291 (Fed. Cir. 2012). Even where a claim was amended, "[t]he scope of the estoppel must fit the nature of the narrowing amendment." *Intervet*, 617 F.3d at 1291, citing *Festo*, 535 U.S. at 737-38 ("There is no reason why a narrowing amendment should be deemed to relinquish equivalents . . . beyond a fair interpretation of what was surrendered.") (alteration in original). Defendants have not provided any analysis in their motion that ties an amended limitation to any equivalent element.

Because the challenged limitations of "sufficient mass" in claim 1 of the '658 patent (original claim 18), "while isolating the vessel from the rinsing fluid" in claim 21 of the '662 patent (original claim 51), and "aeration means" in claim 1 of the '377 patent (original claim 11) appeared in the claims as *originally presented* (i.e., they were not added by claim amendment),

¹ *See, e.g., Dow Chem. Co. v. Nova Chem. Corp. (Canada)*, C.A. No. 05-737-JJF, 2010 WL 2044931, at *1 (D. Del. May 20, 2010) (elaboration of an expert's opinions in a summary judgment declaration is appropriate and should not be excluded).

there cannot be any prosecution history estoppel for those claim elements (*see* Ex. A ('658) at F'REAL_001399; Ex. B ('662) at F'REAL_001658; Ex. C ('377) at F'REAL_001137-138).

For “means-plus-function” claim elements, such as “grinding means,” “shaving element,” and “aeration means,” the patent laws *require* them to be construed to include equivalents. 35 U.S.C. § 112(f) (means-plus-function claim elements “shall be construed to cover the corresponding structure, material, or acts described in the specification *and equivalents thereof*”).

And even where the disputed claim element was added by amendment and is not in “means-plus-function” form, the claim amendments at issue bear no relation to the non-infringement defenses that Defendants are now asserting, so prosecution history estoppel would not apply to those claim elements. For the '658 patent, the “unrestrained” claim limitation was added to distinguish the mechanical compression spring used in the Harr reference to push the splash shield downward (Ex. A at F'REAL_001495). Like f'real, Hamilton Beach uses a free-floating splash shield on its infringing blenders. The theoretical possibility that there could be *de minimus* friction in the infringing blenders has nothing to do with the springs and similar mechanical means that f'real was distinguishing with its claim amendment. Similarly, the “rinse chamber” limitation was added to claim 15 of the '150 patent to distinguish open access blenders with no blending chamber (Ex. D at F'REAL_001340). Like f'real, Hamilton Beach is using a blending chamber with an access door. The fact that Hamilton Beach adds a movable partition inside their blending chamber has nothing to do with the type of open-access blenders f'real was distinguishing with its claim amendment.

Preclusion Due to Vitiation. Defendants do little more than incant the word “vitiation” and provide a case cite. This is not enough information for Plaintiffs to provide a substantive response, or for the Court to properly consider Defendants’ motion *in limine*.

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Rich Products Corporation*

April 2, 2019

EXHIBIT A

CLAIMS

I Claim:

1. A method for rinsing a splash shield on a mixing machine, the method
5 comprising the steps of:

providing a vessel containing contents to be mixed, the vessel including an
opening;

further providing a mixing machine having a holder for receiving the vessel, a
rotatable mixing element extendable into the vessel for mixing the contents of the
10 vessel, a splash shield positionable over the opening of the vessel, and a nozzle
oriented towards the splash shield;

after mixing the contents of the vessel using the mixing element and with the
splash shield covering the opening, separating the splash shield and the vessel; and
directing rinsing fluid onto the splash shield using the nozzle.

15 2. The method of claim 1, wherein the directing step is performed automatically
after the separating step.

3. The method of claim 1, wherein the holder is moveable in a first direction
20 towards the splash shield and a second direction away from the splash shield and wherein the
separating step includes the step of moving the holder in the second direction.

4. The method of claim 3, wherein:

the mixing element is on a shaft;

25 the splash shield is engageable with a member on the shaft, the splash shield
disengageable from the member in response to upward force against the shield, and
mixing is carried out with the splash shield disengaged from the member;

the step of moving the holder in the second direction separates the vessel and
splash shield and causes the splash shield to engage with the member on the shaft;

30 and

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the method further includes the step of rotating the shaft to rotate the splash shield during the directing step.

5 5. The method of claim 1, further including the step of rotating the splash shield during the directing step.

6. The method of claim 1, wherein the directing step directs warm water.

10 7. The method of claim 1, further including the step of directing rinsing fluid onto the mixing element.

15 8. The method of claim 1, wherein the method includes the steps of:
 with the mixing element in the contents of the vessel, causing relative
 movement of the mixing element and vessel in opposite directions, and
 causing the splash shield to retain the vessel within the holder during relative
 movement of the mixing element and vessel in opposite directions.

20 9. The method of claim 8, wherein in the causing step the mass of the splash shield retains the vessel within the holder.

25 10. On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including a holder for receiving the vessel and a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:

 a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield.

30 11. The improvement of claim 10, wherein the mixing machine is further of the type wherein the mixing element is carried by a shaft, and wherein in the improvement the splash shield is carried by the shaft.

12. The improvement of claim 11, wherein the improvement further includes means for moving the holder in a first direction towards the splash shield to move the vessel into contact with the splash shield and in a second direction away from the splash shield to
5 separate the vessel from the splash shield.

13. The improvement of claim 12, wherein the splash shield is engageable with a member on the shaft and is disengageable from the member in response to upward force by the vessel against the splash shield.

10 14. The improvement of claim 13, wherein the shaft is rotatable to rotate the splash shield as rinse fluid is directed onto the splash shield by the nozzle.

15 15. The improvement of claim 10, wherein the at least one nozzle is oriented to direct rinse fluid onto the mixing element.

16. The improvement of claim 12, wherein the splash shield is of sufficient mass to remain in position covering the opening of the vessel during movement of the holder in the second direction until it engages with the member.

20 17. The improvement of claim 10, wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.

25 18. On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including a holder for receiving the vessel and a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:

30 a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel and having sufficient mass to retain the vessel

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within the holder during relative movement of the mixing element and vessel in opposite directions.

19. The improvement of claim 18, wherein the mixing element is carried on a
5 shaft, and wherein the holder is moveable relative to the mixing element to move the vessel in a first direction towards the mixing element and in a second direction away from mixing element.

20. The improvement of claim 19, wherein the splash shield is carried by the
10 shaft, and wherein the splash shield is engageable with a member on the shaft and is disengageable from the member in response to upward force by the vessel against the splash shield.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

James J. Farrell

Application No.: 11/284,646

Filed: November 22, 2005

For: RINSEABLE SPLASH SHIELD AND
METHOD OF USE

Confirmation No.: 7606

Group Art Unit: 1723

Examiner: Soohoo, Tony Glen

**RESPONSE TO OFFICIAL ACTION
MAILED FEBRUARY 22, 2008**

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being electronically submitted to the United States Patent and Trademark Office using the EFS system on August 22, 2008.

STALLMAN & POLLOCK LLP

Dated: 8/22/2008

By:



Kathleen A. Frost

Sir:

In response to the Official Action mailed February 22, 2008, , please enter the following amendments:

Amendment to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 17 (canceled)

18. (CURRENTLY AMENDED) A mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine comprising:

a holder coupled to the mixing machine, the holder proportioned to receive a vessel;

a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;

a motor operatively coupled to at least one of the holder and the mixing element ~~axially moveable~~ to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;

a shaft; and

a splash shield slidable on the shaft between first and second positions ~~carried by the mixing machine~~, the splash shield in the second position positionable covering the opening of the vessel[[,]] and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.

19. (CURRENTLY AMENDED) The mixing machine of claim 18, wherein the mixing element is carried on the [[a]] shaft, and wherein the holder is moveable relative to the mixing element to move the vessel in a first direction towards the mixing element and in a second direction away from the mixing element.

20. (CURRENTLY AMENDED) The mixing machine of claim 18, wherein the mixing element is carried by the [[a]] shaft, and wherein the splash shield is engageable with a

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member on the shaft and is disengageable from the member in response to upward force by the vessel against the splash shield.

21. (PREVIOUSLY PRESENTED) The mixing machine of claim 19, wherein movement of the vessel in the first direction positions the vessel in contact with the splash shield.

Claims 22-24 are previously canceled.

25. (PREVIOUSLY PRESENTED) The mixing machine of claim 18, wherein the splash shield has a mass of approximately 5 lbs.

26. (CURRENTLY AMENDED) A method for retaining a vessel in a holder while mixing contents of the vessel, the method comprising the steps of:

providing a vessel containing contents to be mixed, the vessel including an opening;

further providing a mixing machine having a holder on the mixing machine for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, and a shield;

positioning the vessel in the holder;

positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening; and

with the vessel positioned in the holder, using a motor to translate ~~translating~~ at least one of the mixing element and the holder such that the mixing element passes through the contents of the vessel, the mass of the splash shield preventing separation of the holder and the vessel during translation.

27. (ORIGINAL) The method of claim 26, wherein the method further includes the step of rotating the mixing element to mix the contents of the vessel.

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28. (ORIGINAL) The method of claim 26, wherein the method further includes containing a substantial portion of contents splashing from the vessel within the shield or vessel.

29. (ORIGINAL) The method of claim 26, wherein the contents of the vessel are at least partially frozen.

30. (ORIGINAL) The method of claim 26, wherein the contents comprise frozen milkshake ingredients.

31. (PREVIOUSLY PRESENTED) The method of claim 27 wherein translating the mixing element includes translating the mixing element while rotating the mixing element to mix the contents of the vessel.

REMARKS/ARGUMENTS

By this amendment, Claims 18- 20 and 26 are amended. Claims 18 – 21 and 25 – 31 are pending.

I. Claim Rejections Based on U.S. 4,822,175 (Barnard et al)

Claims 18-21 and 26-28 have been rejected as being anticipated by Barnard et al (4822175). Claims 25 and 29-31 have been rejected as being obvious in view of Barnard et al.

Claim 18 as amended recites that the holder is coupled to the mixing machine and that the mixing machine includes a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel. The claim additionally recites a splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel. These features carry through to dependent Claims 19 – 21 and 25.

The claims are patentable over Barnard et al, since the disclosed combination of features is not found in the reference, nor is it obvious from the teachings of the reference. Barnard et al requires that the user hold the cup throughout mixing, and does not include a holder coupled to the mixing machine. Moreover, there is no teaching that the splash shield, in the words of the office action, “has sufficient mass to provide a retaining downward force to bias against the top of the cup and retain against the holder’s hand” during movement of the cup by the user’s hand. There is no discussion of the mass of the splash shield, and there is no fair suggestion for including a splash shield of such mass on the Barnard et al device, since the user employs his/her grasp to retain the vessel within his/her hand, tightening and loosing the grasp as needed.

With regard to Claim 25 in which the mass of the splash shield is recited as approximately 5 lbs, the Office Action states that it would have been obvious to use a 5 lb splash shield to provide a stronger cover element for the Barnard et al food mixer. It is unclear what benefit the strength of a 5lb cover would provide to the food mixer described in Barnard et al, and one of skill in the art consider a cover of such a mass to be undesirable given the need for a user to manually reciprocate the cup against that mass.

Concerning the method claims, amended Claim 26 recites the steps of providing a mixing machine having a holder on the mixing machine, and using a motor to translate at least one of the

mixing element and the holder such that the mixing element passes through the contents of the vessel, the mass of the splash shield preventing separation of the holder and the vessel during translation. These steps are likewise present in dependent Claims 27 – 31. For the reasons set forth above, Claims 26 – 31 are patentable over Barnard et al.

II. Claim Rejections Based on U.S. 1,090,148 (Harr)

Claims 18 – 21 and 26 – 28 have been rejected as being anticipated by Harr (1090148).


Amended Claim 18 includes a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and *being unrestrained against sliding movement on the shaft in a direction away from the opening*. Dependent Claims 19 – 21 also include this element.

Similarly, amended Claim 26 includes the step of positioning the shield in contact with the vessel to cover the opening of the vessel, the shield when contacting the vessel being *unrestrained against upward movement away from the opening*. Dependent Claims 27 – 28 also include this feature.

The Harr machine does not anticipate these claims, since it includes a spring 22 that restrains the cover 21 against sliding movement on the shaft in a direction away from the opening of the vessel. Thus the Harr cover is not unrestrained against movement away from the opening of the vessel. For this reason, the claims are patentable over Harr.

III. Conclusion

In view of the forgoing, Applicant submits that the pending claims are allowable over the cited art.

<i>Index of Claims</i> 	Application/Control No. 11284646	Applicant(s)/Patent Under Reexamination FARRELL, JAMES J.
	Examiner Tony G Soohoo	Art Unit 1797

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant		<input type="checkbox"/> CPA		<input type="checkbox"/> T.D.		<input type="checkbox"/> R.1.47			
CLAIM		DATE							
Final	Original	09/21/2006	05/29/2007	02/15/2008	11/26/2008				
	1	-	-	-					
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	15	-	-	-	-				
	16	-	-	-	-				
	17	-	-	-	-				
1	18	✓	✓	✓	=				
2	19	✓	✓	✓	=				
4	20	✓	✓	✓	=				
3	21	✓	✓	✓	=				
	22	✓	✓	-	-				
	23	✓	✓	-	-				
	24	✓	-	-	-				
5	25	✓	✓	✓	=				
6	26	✓	✓	✓	=				
7	27	✓	✓	✓	=				
9	28	✓	✓	✓	=				
10	29	✓	✓	✓	=				
11	30	✓	✓	✓	=				
8	31		✓	✓	=				

EXHIBIT B



PATENT

-1-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

James J. Farrell

Application No.: 11/116,497

Filed: April 28, 2005

For: RINSEABLE SPLASH SHIELD AND
METHOD OF USE

Confirmation No.: 3941

Group Art Unit: 1797

Examiner: Tony Glen Soohoo

**RESPONSE TO RESTRICTION
REQUIREMENT OFFICE ACTION
MAILED JANUARY 14, 2008**

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M/S AMENDMENT
Commissioner for Patents
P.O. Box 1450
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited
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envelope, addressed to: Commissioner for Patents, P.O.
Box 1450, Alexandria, VA 22313-1450 on July 07, 2008.

STALLMAN & POLLOCK LLP

Dated: 07/07/08

By: 

Jameelah D. Adams

Sir:

In response to Restriction Requirement Office Action mailed January 14, 2008, please
amend the above-identified application as follows:

Amendment to the Claims are reflected in the listing of claims which begins on page 2 of this
paper.

Remarks/Arguments begin on page 6 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing material to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel at an access location in the mixing machine, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the access location from the rinsing fluid.

2. (ORIGINAL) The method of claim 1, wherein the directing step is performed automatically after the separating step.

3. (ORIGINAL) The method of claim 1, wherein the holder is moveable in a first direction towards the splash shield and a second direction away from the splash shield and wherein the unshielding step includes the step of moving the holder in the second direction.

4. (ORIGINAL) The method of claim 3, wherein:

the mixing element is on a shaft;

the splash shield is engageable with a portion of the shaft, the splash shield disengageable from that portion of the shaft in response to upward force against the shield, and

mixing is carried out with the splash shield disengaged from that portion of the shaft;

the step of moving the holder in the second direction separates the vessel and splash shield and causes the splash shield to engage with the portion of the shaft; and
the method further includes the step of rotating the shaft to rotate the splash shield during the directing step.

5. (ORIGINAL) The method of claim 1, further including the step of rotating the splash shield during the directing step.

6. (ORIGINAL) The method of claim 1, wherein the directing step directs warm rinse fluid.

7. (ORIGINAL) The method of claim 1, further including the step of directing rinsing fluid onto the mixing element.

8. (ORIGINAL) The method of claim 1, wherein the method includes the steps of:
with the mixing element in the material in the vessel, causing relative movement of the mixing element and vessel in opposite directions, and
causing the splash shield to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.

9. (ORIGINAL) The method of claim 8, wherein in the causing step the mass of the splash shield retains the vessel within the holder.

10. (ORIGINAL) The method of claim 1, wherein the directing step directs a rinse solution comprising sanitizing solution.

11. (ORIGINAL) The method of claim 10, wherein the sanitizing solution includes a quaternary ammonium sanitizer solution.

12. (ORIGINAL) The method of claim 10, wherein the sanitizing solution is a heated sanitizing solution.

13. (ORIGINAL) The method of claim 1, wherein the providing step provides an upwardly directed first nozzle and a downwardly directed second nozzle, and wherein the directing step directs fluid from the first and second nozzles.

14. (ORIGINAL) The method of claim 1, wherein the providing step provides the splash shield to be positionable in contact with the vessel and covering the opening, and wherein the unshielding step includes separating the splash shield and the vessel.

15. (ORIGINAL) The method of claim 1, wherein the providing step provides the mixing machine to include a chamber, and wherein the directing step includes isolating the splash shield within the chamber.

16. (CURRENTLY AMENDED) The method of claim 48 [[15]], wherein the ~~provide~~ ~~step provides~~ barrier includes a door moveable into a closed position covering the chamber, and wherein the isolating step includes moving the door to the closed position.

17. (ORIGINAL) The method of claim 16, wherein the door is positioned at a sloped angle, and wherein the directing step includes allowing rinse fluid flowing off of the splash shield to contact the door and then flow down the slope and off the door into a receiving channel and into a drain.

Claims 18 – 47 (CANCELED)

48. (NEW) The method according to claim 1, wherein the providing step provides a barrier moveable into a position between the chamber and the access area, and wherein the isolating step includes moving the barrier to the position.

49. (NEW) The method of claim 16, wherein the isolating step further includes moving the holder in a direction away from the chamber.

50. (NEW) The method of claim 17 wherein the holder is moveable between a first position in which the opening of vessel is external to the chamber and a second position in which the opening of the vessel is within the chamber, and wherein the isolating step includes moving the holder from the second position to the first position and positioning the barrier between the holder in the first position and the chamber.

51. (NEW) A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing material to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto splash shield using the nozzle while isolating the vessel from the rinsing fluid.

52. (NEW) The method of claim 52, wherein the isolating step isolates the holder from the rinsing fluid.

Notice of Allowability**Application No.**

11/116,497

Applicant(s)

FARRELL, JAMES J.

Examiner

Tony G. Soohoo

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the papers filed 11 NOV 2008.
2. ☒ The allowed claim(s) is/are 1-17 and 48-52.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)


- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

/Tony G Soohoo/
Primary Examiner, Art Unit 1797

<i>Index of Claims</i> 	Application/Control No. 11116497	Applicant(s)/Patent Under Reexamination FARRELL, JAMES J.
	Examiner Tony G Soohoo	Art Unit 1797

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant					<input type="checkbox"/> CPA					<input type="checkbox"/> T.D.					<input type="checkbox"/> R.1.47				
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<i>Index of Claims</i> 	Application/Control No. 11116497	Applicant(s)/Patent Under Reexamination FARRELL, JAMES J.
	Examiner Tony G Soohoo	Art Unit 1797

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant					<input type="checkbox"/> CPA					<input type="checkbox"/> T.D.					<input type="checkbox"/> R.1.47				
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21	51		✓	=															
22	52		✓	=															

EXHIBIT C

CLAIMS

I claim:

1. A method of making a frozen drink, comprising the steps of:
- 5 (a) providing a cup containing a block of frozen substance, the frozen substance having a first volume and being frozen to conform to the interior of the cup;
- (b) grinding the frozen substance in the cup to form a ground substance;
- 10 (c) during step (b), adding a liquid to the ground frozen substance in the cup, the liquid having a second volume;
- (d) incorporating air into the ground frozen substance in the cup, the ground frozen substance, air, and liquid forming a frozen drink having a volume that exceeds the sum of the first and second volumes.
- 15 2. The method of claim 1 wherein the frozen drink has a volume which is at least 15 % greater than the sum of the first and second volumes.
3. The method of claim 1 wherein:
- step (a) further includes providing a rotatable blade;
- step (b) further includes grinding the frozen the substance using the blade; and
- 20 step (d) further includes whipping air into the frozen substance using the blade.

4. The method of claim 1 wherein:
steps (c) and (d) include the steps of first incorporating air into the second volume of liquid to form an aerated liquid and then adding the aerated liquid to the ground frozen substance.

5 5. The method of claim 4 wherein:
step (a) includes providing first and second blades;
step (b) includes grinding the frozen substance with the first blade;
and
steps (c) and (d) include the steps of whipping air into the liquid using the second blade and adding the aerated liquid to the ground frozen substance.

10 6. A method of making a frozen drink, comprising the steps of:
(a) partially filling a cup with a liquid frozen drink ingredient;
(b) freezing the liquid frozen drink ingredient in the cup to form a
15 block of frozen substance having a first volume and substantially conforming to the interior of the cup;
(c) grinding the frozen substance in the cup to form a ground substance;
(d) during step (c), adding a liquid to the ground frozen substance in
20 the cup, the liquid having a second volume;
(e) incorporating air into the ground frozen substance in the cup, the ground frozen substance, air, and liquid forming a frozen drink having a volume that exceeds the sum of the first and second volumes.

25 7. The method of claim 6 wherein the frozen drink has a volume which is at least 15 % greater than the sum of the first and second volumes.

8. The method of claim 6 wherein:
the method further includes the step of providing a rotatable blade;
step (c) further includes grinding the frozen the substance using the
blade; and

5 step (e) further includes whipping air into the frozen substance using
the blade.

9. The method of claim 6 wherein:
steps (d) and (e) include the steps of first incorporating air into the
second volume of liquid to form an aerated liquid and then adding the aerated
10 liquid to the ground frozen substance.

10. The method of claim 9 wherein:
the method further includes the step of providing first and second
blades;
step (c) includes grinding the frozen substance with the first blade;
15 and
steps (d) and (e) include the steps of whipping air into the liquid using
the second blade and adding the aerated liquid to the ground frozen
substance.

20 11. An apparatus for making frozen drinks from a frozen substance frozen
into a cup, comprising:
a housing;
a cup support mounted to the housing;
grinding means for, when a cup containing a frozen substance is
positioned in the cup support, grinding the frozen substance to form a ground
25 substance; and

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Sub B17

aeration means for, when a cup containing a ground or liquid substance is positioned in the cup support, causing air to be incorporated into the ground or liquid substance.

5 12. The apparatus of claim 11 wherein the grinding and aeration means comprise a rotatable blade mounted within the housing for extension into a cup positioned in the cup support

13. The apparatus of claim 12 wherein the blade includes grating elements.

10 Sub B2 14. The apparatus of claim 12 wherein the blade includes first regions lying within a plane and further includes spaced apart regions elevated above the plane.

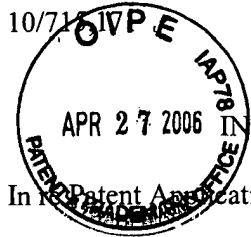
15 15. The apparatus of claim 11 wherein:
the grinding means includes a first blade mounted within the housing for extension into a cup positioned in the cup support;
the apparatus further comprises a liquid dispenser having a vessel and an outlet positioned to direct liquid from the vessel into a cup positioned in the cup support; and
the aeration means includes a second rotatable blade extending into the vessel.

20 16. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:
a housing;
a cup support mounted to the housing;

EXHIBIT D

PATENT

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In Patent Application of

James J. Farrell

Application No.: 10/715,171

Filed: November 17, 2003

For: RINSEABLE SPLASH SHIELD AND
METHOD OF USE

Confirmation No.: 4079

Group Art Unit: 1723

Examiner: Tony Glen Soohoo

**RESPONSE TO OFFICE ACTION MAILED
OCTOBER 4, 2005**

353 Sacramento Street, Suite 2200
San Francisco, CA 94111
Telephone: (415) 772-4900
Facsimile: (415) 398-2890

M/S PETITION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited
with the United States Postal Service as First Class Mail in an
envelope, addressed to: Commissioner for Patents, P.O.
Box 1450, Alexandria, VA 22313-1450 on April 25, 2006.
STALLMAN & POLLOCK LLP

Dated: 04/25/2006

By: 

Tanisha Lawrence-Caceres

Sir:

In response to the Office Action mailed October 4, 2005, and in conjunction with the enclosed
Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37
C.F.R. §1.137(b), please amend the above-identified application as follows:

Amendment to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

04/28/2006 TBESHAH1 00000005 10715171

02 FC:2202

25.00 OP

Atty Docket No.: FRLL-710

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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing contents to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel at an access location in the mixing machine, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, a splash shield positionable over the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the contents of the vessel using the mixing element and with the splash shield covering the opening, separating the splash shield and the vessel; and

directing rinsing fluid onto the splash shield using the nozzle while shielding the access location from the rinsing fluid.

2. (ORIGINAL) The method of claim 1, wherein the directing step is performed automatically after the separating step

3. (CURRENTLY AMENDED) The method of claim 1, wherein the holder is moveable from the access location in a first direction towards the splash shield and a second direction away from the splash shield to the access location and wherein the separating step includes the step of moving the holder in the second direction.

4. (ORIGINAL) The method of claim 3, wherein:

the mixing element is on a shaft;

the splash shield is engageable with a member on the shaft, the splash shield disengageable from the member in response to upward force against the shield, and

mixing is carried out with the splash shield disengaged from the member;

the step of moving the holder in the second direction separates the vessel and splash shield and causes the splash shield to engage with the member on the shaft; and

the method further includes the step of rotating the shaft to rotate the splash shield during the directing step.

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5. (ORIGINAL) The method of claim 1, further including the step of rotating the splash shield during the directing step.
6. (ORIGINAL) The method of claim 1, wherein the directing step directs warm water.
7. (ORIGINAL) The method of claim 1, further including the step of directing rinsing fluid onto the mixing element.
8. (ORIGINAL) The method of claim 1, wherein the method includes the steps of:
with the mixing element in the contents of the vessel, causing relative movement of the mixing element and vessel in opposite directions, and
causing the splash shield to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.
9. (ORIGINAL) The method of claim 8, wherein in the causing step the mass of the splash shield retains the vessel within the holder.
10. (CURRENTLY AMENDED) On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including ~~a holder for receiving the vessel and a~~ rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:
a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and
at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield within the rinse chamber.
11. (ORIGINAL) The improvement of claim 10, wherein the mixing machine is further of the type wherein the mixing element is carried by a shaft, and wherein in the improvement the splash shield is carried by the shaft.
12. (ORIGINAL) The improvement of claim 11, wherein the improvement further includes means for moving the holder in a first direction towards the splash shield to move the vessel into contact

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with the splash shield and in a second direction away from the splash shield to separate the vessel from the splash shield.

13. (ORIGINAL) The improvement of claim 12, wherein the splash shield is engageable with a member on the shaft and is disengageable from the member in response to upward force by the vessel against the splash shield.

14. (ORIGINAL) The improvement of claim 13, wherein the shaft is rotatable to rotate the splash shield as rinse fluid is directed onto the splash shield by the nozzle.

15. (ORIGINAL) The improvement of claim 10, wherein the at least one nozzle is oriented to direct rinse fluid onto the mixing element.

16. (ORIGINAL) The improvement of claim 12, wherein the splash shield is of sufficient mass to remain in position covering the opening of the vessel during movement of the holder in the second direction until it engages with the member.

17. (ORIGINAL) The improvement of claim 10, wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions.

Claims 18 – 20 are canceled.

21. (ORIGINAL) The method of claim 1, wherein the directing step directs a rinse solution comprising sanitizing solution.

22. (ORIGINAL) The method of claim 21, wherein the sanitizing solution includes a quaternary ammonium sanitizer solution.

23. (CURRENTLY AMENDED) On a mixing machine of a type having a rotatable mixing element extendable into a vessel for mixing the contents of the vessel, the improvement comprising:
a splash shield carried by the mixing machine, the splash shield positionable to shield the opening of the vessel,
a source of rinse fluid; [[and]]

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at least one nozzle coupled to the source of rinse fluid and oriented to direct rinse fluid onto the splash shield; and

an access location in the mixing machine, the vessel positionable at the access location in preparation for mixing of the vessel contents and retrievable from the access location following mixing; and

a barrier moveably positioned to shield the access location from rinse fluid.

24. (ORIGINAL) The improvement of claim 23, wherein the source of rinse fluid comprises sanitizing solution.

25. (ORIGINAL) The improvement of claim 24, wherein the sanitizing solution includes a quaternary ammonium sanitizer solution.

26. (NEW) The method of claim 1 wherein:
the mixing machine further includes a rinse chamber having an entrance and a door,
during the rinsing step the splash shield is positioned within the rinse chamber; and
wherein the shielding step includes moving the door to a closed position to enclose the splash shield within the rinse chamber.

27. (NEW) The method of claim 26 wherein the door defines a flow path and wherein the method includes causing rinse water falling from the splash shield to flow along the flow path to a drain.

28. (NEW) The method of claim 26 wherein the separating step includes the step of moving the holder in a first direction to move the opening of the vessel from a first position within the rinse chamber to a second position at the access location.

29. (NEW) The improvement of claim 10, wherein:
the improvement further includes a holder proportioned to receive the vessel and moveable in a first direction to carry at least the opening of the vessel through the entrance into the rinse chamber and into contact with the splash shield, and moveable in a second direction to separate the opening of the vessel from the splash shield.

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REMARKS

Claims 1-17 are currently pending. By this amendment, Claims 18 – 20 are canceled, Claims 1, 3, 10 and 23 are amended, and Claims 26 – 29 are newly added.

I. Double Patenting

In response to the provisional double patent rejection based on Application No. 11/116,497, Applicant encloses a terminal disclaimer.

II. Election/Restriction

Applicant confirms the election of Claims 1 – 17 and 21-25 made via telephone. Claims 18 – 20 have been canceled and resubmitted in a divisional application.

III. Claim Rejections Under 35 USC § 103

All claims have been rejected as obvious in view of the prior art. In particular:

Claims 1-3, 5-10, 21-22 and 23-25 have been rejected as being unpatentable over Nielson U.S. 5,439,289 in view of Levine U.S. 4,637,221. The Office Action cites Nielson as teaching all of the subject matter of the claims “except for the teaching of having a nozzle and a corresponding method whereby the nozzle is directed to rinse the splash shield lid cover.” Levine is cited as teaching a mixing device having an “integrated automatic spray head which may be used to spray and clean the surfaces of the mixer element and mixing vessel which has food debris such that it is ready for a subsequent use.” Although Levine does not describe using a spray head to spray a splash shield, the Office Action states that it would be obvious from the teachings of Levine to modify Nielson to provide a spray head directed at “any and all surfaces of the mixing chamber in which residual food may reside, including the lid 16 of Nielson”

Claims 4 and 11 – 17 have been rejected as unpatentable over Nielson in view of Levine, and further in view of Harr U.S. 1,090,148. The Office Action cites Harr as teaching “a lid 21 which is movable mounted upon a shaft by a spring 22 such that it may be disengaged from a lower position shaft member position in order to bias the lid.”

Claim 1 as amended recites that the mixing machine has a holder for receiving the vessel at an access location in the mixing machine, and the step of directing rinsing fluid onto the splash shield using the nozzle while shielding the access location from the rinsing fluid. In one example of an embodiment described in Applicant’s specification, the rinsing occurs in a rinse chamber that is shielded from the location from which the user retrieves the cup 14 from the cup holder 16. This allows thorough rinsing of the splash shield and/or other components (e.g. the shaft and/or the mixing element) without creating a

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mess in the portion of the machine that is accessed by a user preparing a drink. The features of Claim 1 carry through to Claims 2 – 9, 21, 22 and 26 - 28 which are dependent on Claim 1.

The Nielson reference does not include any teachings concerning rinsing of the splash shield. For this reason, Nielson does not teach the step of directing rinsing fluid onto the splash shield using the nozzle while shielding the access location from the rinsing fluid as recited in Claim 1. This step is likewise missing from Levine. According to Levine's method, ice cream and condiments are scooped into a funnel 21. The mixer 26 passes into the funnel 21, mixing the contents and pushing the contents into a cup in holder 42. Afterwards, the spray nozzle 40 sprays rinse fluid onto the mixer 26. The fluid flows into the funnel 21 thereby rinsing the funnel 21, and then passing to the cup holder 42 which is disposed in a sink 43 having a drain. In the Levine machine the rinse fluid flows through a funnel 21 that is oriented in longitudinal and axial alignment with the cup holder 42 that is mounted in the sink 43 that receives spent wash water. Thus the rinse water is specifically and purposefully directed to pass through the cup holder 42 on the way to the sink 43, rather than being shielded from it. Since Levine does not provide the teachings missing from Neilson, Claims 1– 9, 21, 22 and 26 - 28 are patentable over the cited references.

Claim 10, as amended, recites a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance. The cited references do not disclose such a feature, nor is there a fair suggestion for modifying the references to include this feature. Thus, Claims 10-17 and 29 are allowable.

Claim 23 as amended recites an access location in the mixing machine, the vessel positionable at the access location in preparation for mixing of the vessel contents and retrievable from the access location following mixing; and a barrier moveably positioned to shield the access location from rinse fluid. Claims 24 – 25 are dependent on Claim 23 and thus also include these features. For reasons set forth above, these features are absent from the cited references, and there is no fair suggestion for modifications to the cited references to include these features.

Respectfully submitted,

STALLMAN & POLLOCK LLP

Dated: April 25, 2006

By: Kathleen A. Frost
Kathleen A. Frost
Reg. No. 37,326

Attorneys for Applicant(s)

Index of Claims

Application/Control No.

10/715,171

Examiner

Tony G. Soohoo

Applicant(s)/Patent under
Reexamination

FARRELL, JAMES J.

Art Unit

1723

✓	Rejected
=	Allowed

-	(Through numeral) Cancelled
+	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claim	Final	Original	Date
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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and
RICH PRODUCTS CORPORATION,

Plaintiffs,

V.

**HAMILTON BEACH BRANDS,
INC., HERSHEY CREAMERY
COMPANY and PAUL MILLS d/b/a
MILLS BROTHERS MARKETS,**

Defendants.

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C.A. No. 16-41 (CFC)
CONSOLIDATED

**DEFENDANTS' REPLY IN SUPPORT OF
DEFENDANTS' MOTION *IN LIMINE* NO. 2**

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Dated: April 8, 2019

Counsel for Defendants

Dr. Maynes's Opinion. As explained in Defendants' Opp. to MIL No. 3, there was no failure "to provide any meaningful response" to Plaintiffs' infringement contentions during discovery. The contention that "Plaintiffs and Dr. Maynes were left to guess what Defendants' non-infringement defenses might be" is not true. In any event, the burden to prove infringement rests firmly on Plaintiffs, so if they wanted to use Dr. Maynes to support application of the DOE, then Dr. Maynes was required to include that analysis in his infringement report.¹

Prosecution History Estoppel. Defendants showed that f'real made narrowing amendments during prosecution to gain allowance. Therefore, estoppel is presumed to apply, which Plaintiffs did not even attempt to rebut, instead contending that "[b]ecause the challenged limitations . . . appeared in the claims as *originally presented* (i.e., they were not added by claim amendment), there cannot be any prosecution history estoppel." Defendants' Motion shows that Plaintiffs' are mistaken. *See* Motion at 2-3 (citing D.I. 178 at 5, 12-14; D.I. 216 at 6-7 for the '658 Patent; citing Ex. C at 3, 6-7 for the '150 Patent; citing *id.* at 2, 6-7 for the '662 Patent; and citing Ex. D at 2, 5, 10-12 for the '377 Patent²). Plaintiffs also **admit** that the amendments were made to distinguish prior art, Pls.' Opp. to MIL No. 1 at 3, which cannot be tangential to patentability. *See Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 330 F.3d 1352, 1357 (Fed. Cir. 2003).³

¹ Plaintiffs do not assert that Dr. Maynes' conclusory expert opinion is sufficient for supporting application of the DOE. Plaintiffs' instead point **solely** to Dr. Maynes's belated declaration filed in response to Defendants' summary judgment motion. Thus, the *Dow* case is inapposite. *See Dow Chem. Co. v. Nova Chems. Corp. (Canada)*, C.A. No. 05-737-JJF, 2010 WL 2044931, at *2-3 (D. Del. May 20, 2010) (refusing to exclude a supplemental declaration that provided "**greater** detail" than the initial declaration) (emphasis added). Plaintiffs previously provided **no** detail.

² Plaintiffs' contention that "the patent laws *require* ["means-plus-function" terms] to be construed to include equivalents" is misleading. An element "expressed as a means . . . for performing a specified function" shall "cover the corresponding **structure** . . . in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6 (emphasis added). An equivalent **function** is not implicated, which Plaintiffs amended during prosecution to gain allowance.

³ Plaintiffs ignore the "dedication-disclosure" doctrine and vitiation doctrine arguments, including the examples provided, and thus do not reasonably dispute them.

PRETRIAL ORDER EXHIBIT 18

IN THE UNITED STATES DISTRICT
COURT FOR THE DISTRICT OF
DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

DEFENDANTS' MOTION IN LIMINE NO. 3

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Dated: March 26, 2019

Counsel for Defendants

Defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively, “Defendants”) respectfully move the Court to instruct f’real Foods, LLC (“f’real”) and Rich Products Corporation (“Rich”) (collectively, “Plaintiffs”), Plaintiffs’ attorneys, witnesses, and all other persons involved in this case on Plaintiffs’ behalf, not to mention or to bring before the jury, either directly or indirectly, by any means or manner, any of the matters set forth in the paragraphs below, unless and until such matters have been first called to the Court’s attention, out of the presence and/or hearing of the jury, giving Defendants an opportunity to object and obtain a ruling prior to any mention or reference to the following:

Motion in Limine No. 3. Plaintiffs should be precluded from offering any testimony, evidence, argument or reference relating to Dr. Maynes' untimely disclosure and improper reliance on: (a) Dr. Maynes' January 2019 testing; and (b) f'real's withheld 2015 testing.

a. Dr. Maynes' Brand New January 2019 Testing. In January 2019, long after fact and expert discovery had closed, Plaintiffs supported their opposition to Defendants' Motion for Summary Judgment (D.I. 199) with a declaration of their technical expert, Dr. Daniel Mayes (D.I. 201), that included brand new "grinding" and "shaving" testing conducted on January 5, 2019 (D.I. 201 at ¶¶ 24-29). The new testing was (of course, being that it was new) never disclosed in Dr. Maynes' expert reports or at his deposition. Thus, the testing and conclusions are not admissible. They are inadmissible for purposes of summary judgment, thus Defendants objected and set forth their argument as part of their summary judgment reply brief pursuant to Fed. R. Civ. P. 56(c)(2). *See* D.I. 216 at 1-3. And they are inadmissible at trial, for those same reasons (which are incorporated by reference herein), and also because of the extraordinary and unfair prejudice that would befall Defendants if this testing were allowed at trial. Plaintiffs' failure to conduct and include these tests in Dr. Maynes' expert report resulted in no disclosed expert report opinions on this testing, no deposition of Dr. Maynes on this testing, no opportunity for a rebuttal testing or opinions by Defendants' expert, and overall no discovery or exploration whatsoever regarding the testing. It would be patently unfair and unduly prejudicial to allow Plaintiffs' to utilize this new testing at trial under these circumstances.

b. Withheld 2015 Testing. Fact discovery concluded on July 13, 2018 (D.I. 168 ¶ 3.a). Plaintiffs never produced “aeration” testing on the accused Hamilton Beach blenders conducted by their employees. Yet, Plaintiffs introduced two sets of 2015 f’real “aeration” tests on Hamilton Beach blenders for the *first time* as an attachment to Dr. Maynes’s Opening Expert Report dated August 23, 2018 (*see* Ex. A, Exhibit B to Dr. Maynes’ Expert Report). Defendants objected to these documents during Dr. Maynes’ deposition, when it became apparent what these documents were. *See* Ex. B (Maynes Dep. Tr. at 188). The tests were conducted in 2015 by f’real employees Curtis Tom (pp. 1-3) and Mike Partsuf (remaining pages), neither of whom were identified in the initial disclosures or interrogatory responses.

Such untimely disclosures should be precluded because they were improperly withheld during fact discovery, and their use at trial will unfairly prejudice Defendants, which have no way of curing the prejudice before trial. *See* Fed. R. Civ. P. 37(c)(1) & (b)(2); *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1380 (Fed. Cir. 2005) (holding that the district court did not abuse its discretion by precluding patentee’s reliance on test results that were provided after the close of discovery).

Despite being requested by Defendants, Plaintiffs withheld these testing documents from production during fact discovery. Ex. C (Request for Production Nos. 10, 43); Ex. D (Interrogatory No. 10). Plaintiffs’ withholding of the testing has unfairly prejudiced Defendants. Defendants did not have the opportunity to depose

Messrs. Tom and Partsuf regarding these tests because Defendants, during fact discovery, did not know that these tests results from 2015 existed or who conducted the tests. Indeed, Defendants did not learn that Mr. Partsuf conducted tests—or even the name of Mr. Partsuf—until Dr. Maynes’ deposition on October 17, 2018. Ex. B at 162.

Moreover, Dr. Maynes’ reliance on the test results would not be permitted under FRE 703, which allows experts to rely on documents “of a type reasonably relied upon by experts in the particular field” and where “their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.” Fed. R. Evid. 703. Dr. Maynes conceded the unreliability of Mr. Tom’s testing. *See* Ex. B at 186-87. As for Mr. Partsuf’s testing, its scientific credibility is doubtful and remains untested because of its withholding during fact discovery, and Dr. Maynes, without arranging, supervising, or witnessing the tests, merely “adopt[ed]” the testing results *ex post facto* based on his rote conclusion that they “were conducted in a scientific manner and their results make sense,” without even alleging that the protocols or methods established by f’real’s employees were known or accepted. *See* Ex. E (Maynes Expert Report at 70). The unsupervised testing performed by f’real’s employees should be precluded at trial.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS
CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and
HERSHEY CREAMERY COMPANY

Defendants.

C.A. No. 16-41-CFC

CONSOLIDATED

**DECLARATION OF FRANCIS DIGIOVANNI IN SUPPORT OF
DEFENDANTS' MOTION *IN LIMINE* NO. 3**

I, Francis DiGiovanni, declare:

1. I am a licensed attorney with the law firm of Drinker Biddle & Reath LLP, counsel for defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively "Defendants") in the above-captioned action. I am admitted to practice in this District, I am over 18 years of age, and have personal knowledge of the matters stated in this declaration and would testify truthfully to them if called upon to do so. I submit this declaration in support of Defendants' Motion *in Limine* No. 3, filed contemporaneously herewith.

2. Attached hereto as Exhibit A is a true and correct copy of Exhibit B to the Opening Expert Report of Daniel Maynes, Ph.D.

3. Attached hereto as Exhibit B is a true and correct copy of excerpts from the October 17, 2018 deposition of Dr. Daniel Maynes.

4. Attached hereto as Exhibit C is a true and correct copy of Plaintiff F'Real Foods LLC's Responses to Defendant Hamilton Beach Brands, Inc's First Request for Production of Documents and Things.

5. Attached hereto as Exhibit D is a true and correct copy of Plaintiff F'Real Foods LLC's Amended Responses to Defendant Hamilton Beach Brands, Inc's First Set of Interrogatories to Plaintiffs (Nos. 1-11).

6. Attached hereto as Exhibit E is a true and correct copy of the Opening Expert Report of Daniel Maynes, Ph.D.

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed this 26th day of March, 2019, in Wilmington, Delaware.

/s/ Francis DiGiovanni
Francis DiGiovanni, Esq.
francis.digiovanni@dbr.com
DRINKER BIDDLE & REATH LLP

EXHIBIT A

EXHIBIT B

Evaluating Whether MIC2000 Aerates Frozen Products

Initial Test

June 22, 2015

Tests conducted by Curtis Tom and documented by Jens Voges

Introduction

We have previously observed that when one puts aerated frozen product (product with overrun) into a blender, the blender typically first reduces the aeration. Adding liquid typically further reduces the aeration. The MIC2000 is assumed to do both.

Hypothesis

The question is whether the MIC2000 subsequently (re-)aerates the frozen product. The hypothesis is that it does, especially considering the presence of the wave-like wing on its spindle assembly, in addition to the multiple whipping cycles that it incorporates into the blend profile.

Summary Test Description and Results

To test the hypothesis the following experiment was conducted on Friday, June 19 and Saturday, June 20, 2015.

- 1) 4 Hershey Creamery Cups were filled with enough f'real melted product such that the pre-blend fill height was approximately 0.82" from the top of the cup – the fill height Hershey Creamery has been previously observed to use for their products. The picture below shows a representative sample after freezing the product. Since we don't have a commercial hardening chamber in our office, a standard walk-in freezer was used to freeze the product. The domed top surface of the frozen product is an artifact of that freezing approach.



- 2) Water was added to the top of the frozen product. Since the MIC2000 unit we have in the office isn't injecting water during the blend cycle, water was manually added right before blending.

Note that this workaround may underrepresent the potential aeration since the blender is more likely to fling some of the water out of the cup in this configuration. The first cup was filled with approximately 78 ml of water on top of the frozen product based on the field observations that the blender adds roughly 2.7 fl oz of water or 79.8 ml. The below picture shows the cup with the water added prior to blending.



- 3) The cup completely overflowed during blending. A very rough estimate is that 1/3 of the product contents were lost. This first sample strongly indicated that aeration was occurring due to the significant volume expansion.
- 4) Since so much product was lost, less water was added to the subsequent samples. Roughly 30 ml was added to the second sample, 20 ml to the third and 10 ml to the fourth sample. A picture of the third sample with 20 ml added pre-blending is shown below.



- 5) In the first 3 samples, an appreciable amount of product spilled out of the cup during blending indicated that the post blend volume exceeded the volume of the cup. The 4th sample had minimal/overflow. A picture of the product remaining in all four cups post blending is shown below. Note that the post blend volume of the 4th sample (all the way on the right) still comes almost to the rim.



Conclusion

While more scientific and controlled testing may be worth pursuing, this test indicates that the MIC2000 is aerating the product as evidenced by the post blend volume exceeding the pre-blend volume of a product that starts with zero (or close to zero) overrun.

HB BLENDER OVERRUN REPORT

OBJECTIVE

The goal of this study is to evaluate the overrun changes throughout the blending process, specifically as it relates to the claim that the Hamilton Beach MIC 2000 blender does not change the overrun during the blending, and all overrun is created during freezing (before blending).

MATERIALS AND METHODS

The test was conducted according to the final procedure for Determination of Overrun in Pre-blend and Blended Products TP000X (attached). We evaluated products with no inclusions (chocolate, vanilla, and strawberry milkshakes).

We tested three sets of samples.

The first set of samples included commercial products made by Hershey Creamery Co. (chocolate, vanilla, strawberry). The commercial products have high overrun created before blending (during freezing).

The first set was tempered at 12°F overnight. The volume of water added during blending (both shots) was 143 ml according to the procedure TP00X.

The second set of samples included the same commercial products with high initial overrun (chocolate, vanilla, strawberry). These samples were tempered at 5°F overnight. The added water volume (both shots) was reduced to 86.5-87.0 g (approx. 3 oz). The blender manual recommends calibrating water shots to accommodate different water pressures and avoid excessive product leaking during mixing.

The third set of samples included two products (chocolate and vanilla) **with the overrun removed**. In order to remove the overrun the samples were allowed to melt at room temperature overnight and then were warmed up to 100-110°F and kept at this temperature for 4 hours in a water bath. We periodically added hot water. This allowed air to escape. Then the samples were frozen and tempered overnight at 5°F. The added water volume (both shots) was 86.5-87.0 g (approx. 3 oz), same as for the second set.

The density of the mix was calculated based on the measured total solids and total fat.

We measured overrun at four points in the blending process (for all samples):

1. Before blending,
2. After 2 cycles (bore and slow whip),
3. After 3.5 cycles, (whip)
4. After 6 cycles (bore and whip)- full blend.

DISCUSSION

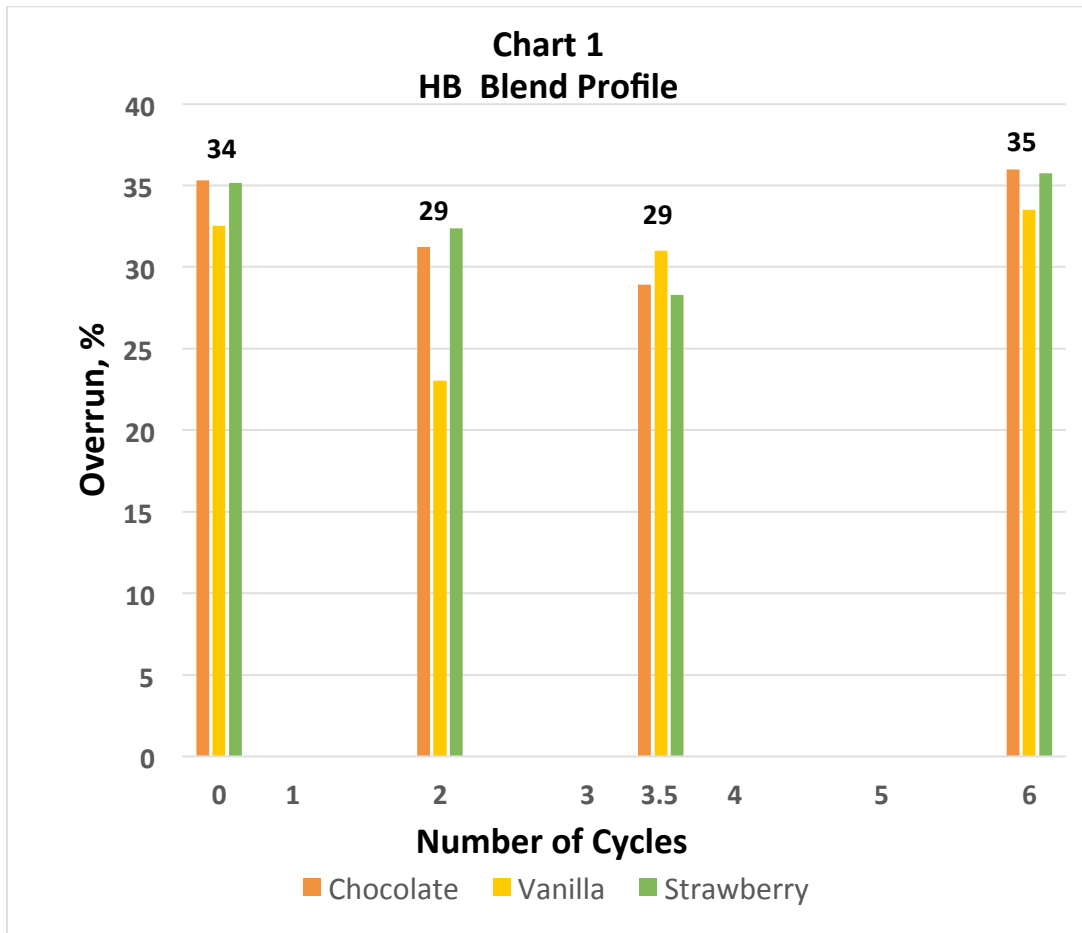
The first set of samples at 12°F was very soft before blending.

The blended products were very thin and watery, like a beverage not a milkshake. It did not look like the right texture.

There was significant spilling of the product during blending. Approximately 100-120g of the product was spilled. This would compromise the accuracy of the test. It appeared that the product temperature before blending was too high and the added water volume was too high as well.

For these reasons we did not present the data from the first set.

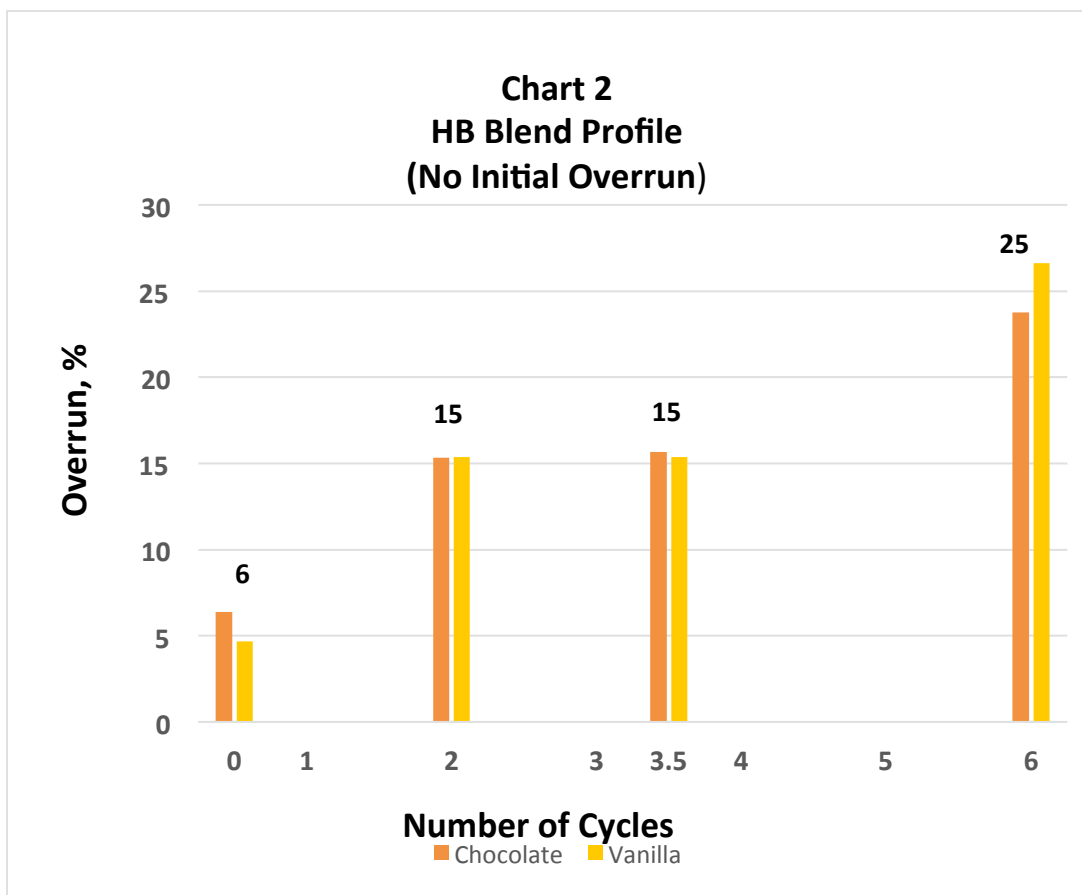
The results for the second set of samples are presented in Chart 1.



Each data point is an average of three measurements (three blended cups). The data show that all three products (chocolate, vanilla, and strawberry) are very close in initial overrun, in blending profile, and in the final overrun.

If we take an average of these three products (each data point will be an average of 9 measurements) we can see that the initial overrun (before blending) is around 34%. After 2 cycles (bore and slow whip) the overrun was reduced to 29%. After 3.5 cycles (whip) the overrun was still 29%. After complete blending - 6 cycles (bore and whip) the overrun increased to 35%, which is essentially the same as the initial overrun before the blending.

The results for the third set of samples (with the overrun removed) are presented in Chart 2.



Each data point is an average of three measurements for vanilla (three blended cups) and two measurements for chocolate (two blended cups). The data show both products (chocolate and vanilla) are very close in initial overrun, in blending profile, and in the final overrun.

For both products the initial (remaining) overrun was close to 6%.

The chart shows that the overrun increase gradually during the blending process. The overrun reached about 25% after the full blending.

The overrun did not reach the same level as in the products with high initial overrun, where the overrun was created before blending (during freezing) and during the last stage of the blending.

CONCLUSIONS

1. For the commercial products (with high initial overrun) the overrun after blending (35%) was essentially the same as the overrun before blending (34%). However, the HB blender reduces the overrun during the early part of the blending process and then it whipped the product and increased the overrun back to the initial level.
2. For the products with very low initial overrun, the overrun increased gradually during the whole blending process and reached 25% at the end of the blending.
3. The HB blender increased the overrun significantly, especially for the samples with low initial overrun.

ADDITIONAL OBSERVATIONS

1. About $\frac{1}{4}$ to $\frac{1}{3}$ of the product in the cup was not blended (on the bottom and on the sides), because the blending blade does not have a moving piece. The product that was actually blended, was thin, more like a beverage, not a milkshake.
2. Every blended cup had some product spilled. The spilled amount was on average 22g (between 16g and 35g). When we observed the HB blender operation at a trade show, we also noticed some product spilling.
3. All blended cups were below the declared volume of 400 ml (13.5 fl. oz) as stated on the labels. The average volume of the blended milkshakes was 370 ml with the range between 351 ml and 380 ml. That was due to the spilled product and low initial fill volume.
4. The initial product volume (before blending) was between 291 ml and 313 ml. The declared volume is 312 ml (10.5 fl. oz).

Appendix 1: Data to Determine Blended Overrun for Commercial Products (with High Initial Overrun)

Water shots total: 86.5 g (3 Oz)

Temperature: 5F

Cup #	Test Sample	Unfrozen Mix Volume per cup (mL) Variable U (calculated)	Full Cup of Water (g) Variable V	Pre-blend water added to headspace (g) Variable W	Total Weight Before Blend (g) Variable X	Total Weight after Blend (g) Variable Y	Blended product water added to headspace (g) Variable Z	
16	Chocolate 5210 20:59	230.55	480.00		259.60	306.90	139.50	3 1/2 cycles
17	Chocolate 5210 20:60	228.06	480.00		256.80	293.00	148.00	3 1/2 cycles
18	Chocolate 5210 20:61	222.29	480.00		250.30	296.60	145.10	3 1/2 cycles
19	Chocolate 5210 20:62	226.11	480.00		254.60	296.10	142.50	2 cycles
20	Chocolate 5210 20:63	229.66	480.00		258.60	287.80	148.20	2 cycles
21	Chocolate 5210 19:54	232.33	480.00		261.60	297.10	140.20	2 cycles
4	Chocolate 5210 20:57	224.25	480.00		252.50	318.10	110.10	Full blend
5	Chocolate 15:27 5147	225.49	480.00		253.90	322.50	106.20	Full blend
6	Chocolate 15:27 5147	222.65	480.00		250.70	318.30	107.50	Full blend
20	Strawberry 5210 17:05	236.19	480.00		265.00	299.80	131.10	2 cycles
21	Strawberry 5210 17:05	220.59	480.00		247.50	282.90	150.00	2 cycles
22	Strawberry 5210 17:05	222.64	480.00		249.80	292.30	146.80	2 cycles
23	Strawberry 5210 17:05	221.21	480.00		248.20	286.70	157.80	3 1/2 cycles
24	Strawberry 5210 17:05	230.66	480.00		258.80	296.70	147.10	3 1/2 cycles
25	Strawberry 20:51 5075	233.78	480.00		262.30	297.10	144.20	3 1/2 cycles
10	Strawberry 5182 16:45	228.70	480.00		256.60	323.80	103.50	Full blend
11	Strawberry 5182 17:31	224.60	480.00		252.00	322.60	99.60	Full blend
3	Strawberry 5182 16:46	231.28	480.00		259.50	324.20	105.20	Full blend
21	Vanilla 4325 15:28	224.91	480.00		251.90	287.40	178.00	2 cycles
22	Vanilla 15:32 5148	227.77	480.00		255.10	283.20	177.20	2 cycles
23	Vanilla 15:43 5146	231.25	480.00		259.00	295.30	143.10	2 cycles
24	Vanilla no code	226.25	480.00		253.40	286.10	153.20	3 1/2 cycles
25	Vanilla no code	225.98	480.00		253.10	288.90	151.80	3 1/2 cycles
26	Vanilla 5209 19:22	221.96	480.00		248.60	281.00	151.10	3 1/2 cycles
10	Vanilla 16:58 5075	229.82	480.00		257.40	315.20	113.20	Full blend
11	Vanilla 16:59 5075	225.54	480.00		252.60	304.00	128.50	Full blend
2	Vanilla 15:32 5148	224.38	480.00		251.30	317.60	115.30	Full blend

Appendix 2: Formula to Determine Blended Overrun for Commercial Products (with High Initial Overrun)

Cup #	Test Sample	Water Shot Volume (mL)	Product Volume (mL)	Air added during blending (mL)	% Overrun		AVERAGE OVERRUN
	Formula	$D = Y - X$	$N = V - Z$	$E = N - (+ D)$	$E/U*100$		
16	Chocolate 5210 20:59	47.30	340.50	62.65	27.17	3 1/2 cycles	28.90
17	Chocolate 5210 20:60	36.20	332.00	67.74	29.70	3 1/2 cycles	
18	Chocolate 5210 20:61	46.30	334.90	66.31	29.83	3 1/2 cycles	
19	Chocolate 5210 20:62	41.50	337.50	69.89	30.91	2 cycles	31.22
20	Chocolate 5210 20:63	29.20	331.80	72.94	31.76	2 cycles	
21	Chocolate 5210 19:54	35.50	339.80	71.97	30.98	2 cycles	
4	Chocolate 5210 20:57	65.60	369.90	80.05	35.70	Full blend	36.00
5	Chocolate 15:27 5147	68.60	373.80	79.71	35.35	Full blend	
6	Chocolate 15:27 5147	67.60	372.50	82.25	36.94	Full blend	
20	Strawberry 5210 17:05	34.80	348.90	77.91	32.99	2 cycles	32.37
21	Strawberry 5210 17:05	35.40	330.00	74.01	33.55	2 cycles	
22	Strawberry 5210 17:05	42.50	333.20	68.06	30.57	2 cycles	
23	Strawberry 5210 17:05	38.50	322.20	62.49	28.25	3 1/2 cycles	28.30
24	Strawberry 5210 17:05	37.90	332.90	64.34	27.89	3 1/2 cycles	
25	Strawberry 20:51 5075	34.80	335.80	67.22	28.75	3 1/2 cycles	
10	Strawberry 5182 16:45	67.20	376.50	80.60	35.24	Full blend	35.75
11	Strawberry 5182 17:31	70.60	380.40	85.20	37.93	Full blend	
3	Strawberry 5182 17:33	64.70	374.80	78.82	34.08	Full blend	
21	Vanilla 4325 15:28	35.50	302.00	41.59	18.49	2 cycles	23.03
22	Vanilla 15:32 5148	28.10	302.80	46.93	20.61	2 cycles	
23	Vanilla 15:43 5146	36.30	336.90	69.35	29.99	2 cycles	
24	Vanilla no code	32.70	326.80	67.85	29.99	3 1/2 cycles	30.99
25	Vanilla no code	35.80	328.20	66.42	29.39	3 1/2 cycles	
26	Vanilla 5209 19:22	32.40	328.90	74.54	33.58	3 1/2 cycles	
10	Vanilla 16:58 5075	57.80	366.80	79.18	34.45	Full blend	33.50
11	Vanilla 16:59 5075	51.40	351.50	74.56	33.06	Full blend	
2	Vanilla 15:32 5148	66.30	364.70	74.03	32.99	Full blend	

Appendix 3: Data to Determine Pre-blend Overrun for Commercial Products (with High Initial Overrun)

Cup #	Test Sample	Unfrozen Mix Volume per cup (mL) Variable U (calculated)	Full Cup of Water (g) Variable V	Pre-blend water added to headspace (g) Variable W	Total Weight Before Blend (g) Variable X	Total Weight after Blend (g) Variable Y	Blended product water added to headspace Variable Z
1	Chocolate 16:03 5147	215.54	480.00	188.02	242.7	n/a	n/a
2	Chocolate 16:03 5147	214.85	480.00	189.2	241.92	n/a	n/a
3	Chocolate 16:03 5147	215.83	480.00	188.42	243.03	n/a	n/a
1	Strawberry 5182 16:46	229.21	480.00	167.5	257.17	n/a	n/a
2	Strawberry 5182 16:46	228.52	480.00	172.2	256.4	n/a	n/a
3	Strawberry 5182 16:46	231.57	480.00	168.7	259.82	n/a	n/a
1	Vanilla 15:32 5148	223.10	480.00	185.2	249.87	n/a	n/a
2	Vanilla 15:32 5148	224.32	480.00	182.48	251.24	n/a	n/a
3	Vanilla 15:32 5148	226.14	480.00	179.66	253.28	n/a	n/a

Appendix 4: Formula to Determine Pre-blend Overrun for Commercial Products (with High Initial Overrun)

Cup #	Test Sample	Product Volume (mL)	Added air during freezing (mL)	% Overrun	Avg Overrun
	Formula	$A = V - W$	$B = A - U$	$C = B/U * 100$	
1	Chocolate 16:03 5147	291.98	76.44	35.46	
2	Chocolate 16:03 5147	290.80	75.95	35.35	
3	Chocolate 16:03 5147	291.58	75.75	35.09	35.30
1	Strawberry 5182 16:46	312.50	83.29	36.34	
2	Strawberry 5182 16:46	307.80	79.28	34.69	
3	Strawberry 5182 16:46	311.30	79.73	34.43	35.15
1	Vanilla 15:32 5148	294.80	71.70	32.14	
2	Vanilla 15:32 5148	297.52	73.20	32.63	
3	Vanilla 15:32 5148	300.34	74.20	32.81	32.53

Appendix 5: Data to Determine Blended Overrun for Products with Low Overrun.

Water shots total: 87.0 g (3 Oz)

Temperature: 5F

Cup #	Test Sample	Unfrozen Mix Volume per cup (mL) Variable U (calculated)	Full Cup of Water (g) Variable V	Total Weight Before Blend (g) Variable X	Total Weight after Blend (g) Variable Y	Blended product water added to headspace (g) Variable Z	
22	Chocolate 5182 21:20	221.27	480.00	249.15	282.00	188.00	2 cycles
23	Chocolate 5182 21:20	225.70	480.00	254.14	279.60	198.20	2 cycles
24	Chocolate 5182 21:20	228.01	480.00	256.74	332.40	123.80	Full blend
25	Chocolate 21:24 5294	228.93	480.00	257.78	334.30	118.40	Full blend
2	Chocolate no code	214.85	480.00	241.92	277.80	195.60	3 1/2 cycles
3	Chocolate no code	215.83	480.00	243.03	DIDN'T BLEND		3 1/2 cycles
27	Vanilla 5902 19:22	223.54	480.00	250.36	291.10	179.60	3 1/2 cycles
28	Vanilla 5902 19:22	224.24	480.00	251.15	289.60	184.10	3 1/2 cycles
29	Vanilla 5902 19:22	223.86	480.00	250.72	285.20	187.70	3 1/2 cycles
30	Vanilla 5902 19:22	223.30	480.00	250.10	288.70	186.80	2 cycles
31	Vanilla 5902 19:21	223.95	480.00	250.82	289.30	181.70	2 cycles
32	Vanilla 5902 19:22	222.92	480.00	249.67	285.20	185.80	2 cycles
33	Vanilla 5902 19:20	218.44	480.00	244.65	322.00	125.80	Full blend
34	Vanilla 5902 19:20	221.13	480.00	247.66	326.10	122.70	Full blend
35	Vanilla 5902 19:20	222.30	480.00	248.98	326.70	120.00	Full blend

Appendix 6: Formula to Determine Blended Overrun for Products with Low Overrun.

Cup #	Test Sample	Water Shot Volume (mL)	Product Volume (mL)	Air added during blending (mL)	% Overrun		AVG OVERRUN
	Formula	D = Y - X	N = V - Z	E = N - (U + D)	E/U*100		
22	Chocolate 5182 21:20	32.85	292.00	37.88	17.12	2 cycles	
23	Chocolate 5182 21:20	25.46	281.80	30.64	13.57	2 cycles	15.35
24	Chocolate 5182 21:20	75.66	356.20	52.53	23.04	Full blend	
25	Chocolate 21:24 5294	76.52	361.60	56.15	24.52	Full blend	23.78
2	Chocolate no code	35.88	284.40	33.67	15.67	3 1/2 cycles	
3	Chocolate no code	DIDN'T BLEND				3 1/2 cycles	15.67
27	Vanilla 5902 19:22	40.74	300.40	36.12	16.16	3 1/2 cycles	
28	Vanilla 5902 19:22	38.45	295.90	33.21	14.81	3 1/2 cycles	
29	Vanilla 5902 19:22	34.48	292.30	33.96	15.17	3 1/2 cycles	15.38
30	Vanilla 5902 19:22	38.60	293.20	31.30	14.02	2 cycles	
31	Vanilla 5902 19:21	38.48	298.30	35.87	16.02	2 cycles	
32	Vanilla 5902 19:22	35.53	294.20	35.75	16.04	2 cycles	15.36
33	Vanilla 5902 19:20	77.35	354.20	58.41	26.74	Full blend	
34	Vanilla 5902 19:20	78.44	357.30	57.74	26.11	Full blend	
35	Vanilla 5902 19:20	77.72	360.00	59.98	26.98	Full blend	26.61

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Determination of Overrun in Pre-blend
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Determination of Overrun in Pre-blend and Blended Product

Rev.	ECO No.	Date	Originator Name & Signature	Description of Change
01		17SEP15		Initial Release

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1. PURPOSE:

This document describes the test procedures to determine the percent overrun added to product during freezing and/or from blending.

2. SCOPE:

This protocol applies to the Hamilton Beach MIC 2000 blender system using Hershey's Ice Cream Milkshake products.

3. REFERENCE DOCUMENTS:

- 3.1. Omega HH147U User's Guide
- 3.2. Hamilton Beach MIC2000 Operator's Manual
- 3.3. Information derived from store visit(s) with the Hershey's Shake Shop Express program

4. EQUIPMENT / TOOLS / MATERIALS:

- 4.1. Scale, (add make and model, calibration dates if any)
- 4.2. Dry ice
- 4.3. Graduated cylinder, xx cc
- 4.4. Protective gloves (insulated)
- 4.5. Cold water
- 4.6. Test product samples
- 4.7. Beaker, xx cc
- 4.8. Insulated foam shipper (size?)
- 4.9. Sharpie marker
- 4.10. Press 'n Seal plastic wrap
- 4.11. Thermocouple reader and datalogger, Omega HH147U
- 4.12. Hamilton Beach blender, MIC 2000 s/n: A1241L
- 4.13. Samples of Hershey's milkshake products (specify flavors)

5. PREPARATION:

- 5.1. Water shot volume should be measured prior to the start of blend.
- 5.2. Ensure the blender is set up to manufacturer's default setting so it is representative of a typical blender in the field.
- 5.3. Use one thermocouple to measure the ambient lab temperature and record data.
- 5.4. Use one thermocouple to measure the temperature of the water shot.
- 5.5. Use one thermocouple to measure the temperature of the product prior to blending.
- 5.6. Temper product to be tested at 12F for at least 8 hours or overnight before starting test.
- 5.7. Number test samples on the side of the cup with a Sharpie.
- 5.8. Test only products without inclusions.
- 5.9. Fill up an insulated foam shipper 2/3 full with dry ice (Source: Atlas Welding, 1224 6th Street, Berkeley, CA).

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6. TEST PREPARATION:

- 6.1. Place an empty graduated cylinder on the scale and tare the scale.
- 6.2. Weigh unfrozen flavored mix up to the target cup fill weight in the graduated cylinder.
- 6.3. Record the content in mL (U).
- 6.4. Place an empty sample cup on the scale and tare the scale.
- 6.5. Pour water in the cup to fill the cup all the way to the brim. Record the weight and take a visual reference of the level of the fill (V).
- 6.6. Carefully remove cup from the scale and discard the water.
- 6.7. Record all information in data collection worksheets in appendix A.

7. MEASUREMENT PROCEDURE (OVERRUN IN PRE-BLENDED PRODUCT):

- 7.1. Use **caution** when handling dry ice and wear protective gloves. Prepare a container with dry ice.
- 7.2. Temper an unblended cup in the box of dry ice for 1 hour.
- 7.3. Remove the lid. Place on the scale and tare.
- 7.4. Carefully pour ice cold water into cup to the brim referencing the level the water was at in the Test Preparation step 6.5. Record the weight of added water (W).
- 7.5. Discard water.
- 7.6. Sample can be saved in the freezer and used to determine blended product volume.
- 7.7. Repeat step 7.2 thru 7.6 for additional samples.

8. MEASUREMENT PROCEDURE (OVERRUN IN BLENDED PRODUCT):

- 8.1. Use **caution** when handling dry ice. Prepare container with dry ice near blender for easy access. Wearing protective gloves, dig a hole in the dry ice big enough to insert a cup.
- 8.2. Tare the scale, then take one cup at a time out of the freezer, remove lid and place on a scale.
- 8.3. Record sample number and total weight (X).
- 8.4. Place cup in Hamilton Beach MIC 2000 cup holder and initiate blend.
- 8.5. Remove the blended cup once the blend cycle is complete being careful not to disturb the contents.
- 8.6. Cut a piece of plastic wrap and loosely cover the top of the cup (see example below) and place in dry ice. Try not to disturb or touch the contents of the cup during this step.
- 8.7. Surround cup with dry ice. Be careful not to let dry ice fall in over the top and into the product.
- 8.8. Repeat steps 8.2 thru 8.7 until there is no more room in the dry ice container to fit any more cups.
- 8.9. Cover container and let cups sit undisturbed for about 45 minutes or until cups are frozen solid.
- 8.10. After 45 minutes, tare scale.
- 8.11. Remove lid of container of dry ice. Carefully lift one of the cups, remove plastic wrap covering and place on the scale, Record total weight (Y).
- 8.12. Tare the scale again with the up on top.
- 8.13. Slowly pour ice cold water over the frozen product. Fill to the brim remembering the level of the water in Testing Prep step 6.5.
- 8.14. Record weight of water added to the cup (Z).
- 8.15. Carefully remove cup from scale and throw away.
- 8.16. Repeat steps 8.10 thru 8.14 for the rest of the cups in the dry ice box.

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8.17. Repeat all testing steps if necessary for additional samples.

9. CLEAN UP PROCEDURE:

- 9.1. Replace lid on dry ice box and allow dry ice to sublimate.
- 9.2. Discard contents of test samples but clean and save the empty cups.
- 9.3. Wash any utensils and containers.
- 9.4. Wipe down counter and scale if needed from any spills, leaving work area clean.

10. ACCEPTANCE CRITERIA

- 10.1. None

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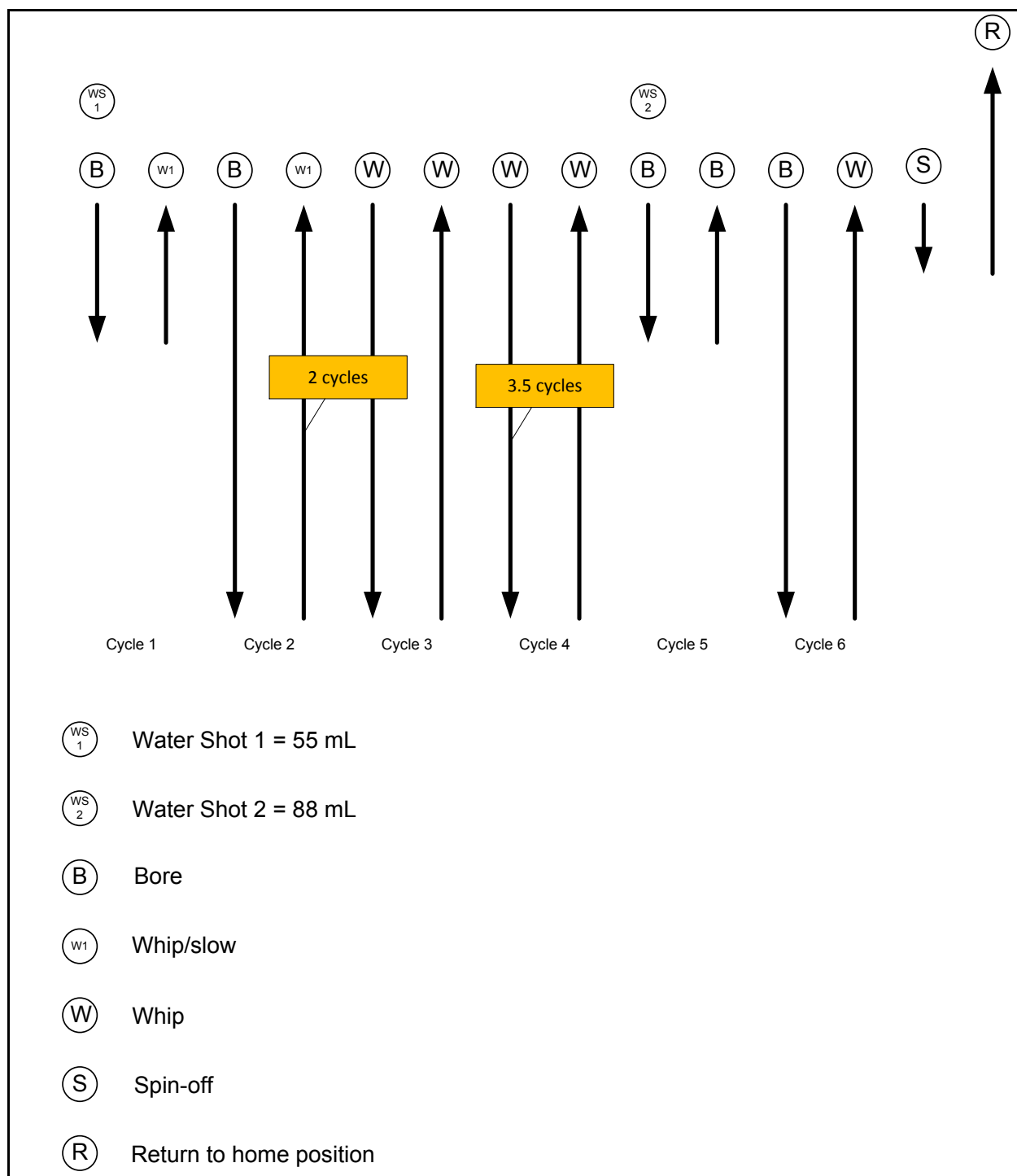
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APPENDIX B: HAMILTON BEACH MIC 2000 BLEND PROFILE:



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APPENDIX C: TEST SEQUENCE:

1. Reference Blend with Hershey's Milkshake Product
 - 1.1. Choose a product with no inclusions (plain milkshake preferable).
 - 1.2. Measure overrun pre-blend per procedures outlined in this protocol.
 - 1.3. Record data.
 - 1.4. Measure overrun post-blend per procedures outlined in this protocol.
 - 1.5. Blender should be set to 1A mode interruption.
 - 1.6. Allow blender to complete full blend cycle without.
 - 1.7. Measure over-run per procedures outlined in this protocol.
 - 1.8. Record data.

2. Aeration study with no initial over-run
 - 2.1. Choose product with no inclusions (plain milkshake preferable).
 - 2.2. Thaw product completely and allow the trapped air to escape from liquid product.
 - 2.3. Re-freeze product thoroughly.
 - 2.4. Measure over-run and record data.
 - 2.5. Blend product (1A mode) per normal blend cycle.
 - 2.6. Measure over-run and record data.

3. Aeration Study at Different Blend Phases (2nd Cycle)
 - 3.1. Choose product with no inclusions (plain milkshake preferable).
 - 3.2. Start blend but turn off blender (use power switch) at the end of the 2nd blend cycle.
 - 3.3. Remove product and follow procedures to measure over-run.
 - 3.4. Record data.

4. Aeration Study at Different Blend Phases (3 ½ Cycles)
 - 4.1. Choose product with no inclusions (plain milkshake preferable).
 - 4.2. Start blend but turn off blender (use power switch) at the end of the 3 1/2 blend cycle.
 - 4.3. Remove product and follow procedures to measure over-run.
 - 4.4. Record data.

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EXHIBIT B

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

-oOo-

F'REAL FOODS, LLC and RICH)
PRODUCTS CORPORATION,)
)
Plaintiffs,)
) C.A. No. 16-41 (GMS)
vs.) CONSOLIDATED
)
HAMILTON BEACH BRANDS, INC.,) VOLUME II
HERSHEY CREAMERY COMPANY and)
PAUL MILLS d/b/a MILLS)
BROTHERS MARKETS,)
)
Defendants.)

VIDEOTAPED DEPOSITION OF DR. DANIEL MAYNES

Taken on Wednesday, October 17, 2018

AT 10:45 a.m.

At Advanced Reporting Solutions

3507 North University Avenue

Suite 350-D

Provo, Utah

Reported by: Nancy A. Fullmer, RMR, CSR

Veritext Legal Solutions

Mid-Atlantic Region

1250 Eye Street NW - Suite 350

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(202) 230-5650
William.Foster@dbr.com

Also Present:

Erik Largin, Videographer

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1 consider the blade's pitch or twist?

2 A. Again, that's -- to me, that's going to
3 depend upon what's the functionality of the blade.
4 In the MIC2000, I see two blades, a lower blade
5 that is clearly intended to bore or grind or grate
6 through the frozen substance or through whatever
7 is in the machine. And then a second blade that's
8 intended to redistribute the fluid throughout the
9 cup to promote large scale fluid motion and
10 entrain air and break up the air into small rocks.

11 Q. Are you -- are you the one that tested
12 for aeration in your report?

13 A. I -- repeat the question. I included in
14 here a report of testing that was done by Mike
15 Partsuf at f'real, whom I met with, and we went
16 over in great detail all aspects of the testing
17 process and protocol.

18 Q. Somehow his name and the date weren't
19 included on the report. There's x-outs. Probably
20 a mistake. So I didn't -- I didn't ever hear
21 Mr. --

22 A. Mr. Partsuf's the name that we were using
23 earlier.

24 Q. Yeah. Yeah. He wasn't in the report, so
25 thanks for clarifying.

1 an appropriate manner.

2 Q. But wouldn't generally accepted
3 scientific principles cause you to try to recreate
4 those test results, sort of trust but verify?

5 MR. CHAMBERS: Objection. Vague and
6 ambiguous as to scientific principles.

7 THE WITNESS: This is -- this is a
8 process I follow with all of the graduate students
9 I work with. Given my duties and responsibilities
10 as a faculty member, I can't run every experiment,
11 in fact, very few, if any, experiments, but I
12 follow the same exact process where we walk
13 through what they're doing, what they're
14 measuring, how they're measuring it, what the data
15 are. I then evaluate the data and I follow the
16 same process.

17 BY MR. FOSTER:

18 Q. But your graduate students aren't using
19 the test results to try to recover millions of
20 dollars of a patent litigation, are they?

21 A. Not typically.

22 Q. Looking at the initial test that was
23 performed, was that test performed with Hershey
24 Creamery's ice cream product?

25 A. Yes. That's my understanding. It was

1 performed with Hershey's ice cream product.

2 Q. Are you sure? The initial testing
3 performed in June 22, 2015, wasn't it f'real
4 product put into Hershey cups?

5 A. Let me just say that this initial set of
6 testing I -- I hardly used to base any of my
7 opinions on. This was initial testing performed
8 by Jim Voges.

9 Q. Okay. So we can discount this initial
10 testing. You relied on the HB blender overrun
11 report.

12 A. That's the testing that I have confidence
13 in because of the -- you know, my own
14 cross-checking and interrogation of that.

15 Q. Who wrote the test protocol?

16 A. Mike Partsuf wrote the test protocol.

17 Q. And when was the testing performed?

18 A. I don't have an exact date on that, but
19 it was sometime around two and a half to three
20 years ago.

21 Q. Two and a half to three years ago, this
22 overrun report?

23 A. That's correct.

24 Q. You don't know an exact date?

25 A. I don't have the exact date. I can get

1 that information. I don't have it at the moment.

2 MR. FOSTER: Counsel, why didn't you
3 produce this report if you were going to rely upon
4 it with your expert?

5 MR. CHAMBERS: We did.

6 MR. FOSTER: You did not produce this HB
7 blender overrun report.

8 MR. CHAMBERS: We did.

9 MR. FOSTER: You did not.

10 MR. CHAMBERS: Okay. Let's not argue
11 about it. Why don't we get to the questions.
12 Let's just get to the questions.

13 MR. FOSTER: For the record, you did not
14 give us an opportunity to depose Mr. Partsuf who
15 actually performed the testing.

16 BY MR. FOSTER:

17 Q. And you did not witness the testing
18 performed by Mr. Partsuf, correct?

19 A. I witnessed all elements of the testing
20 that he did, but I didn't witness every single
21 test result that took place.

22 Q. What do you mean by you witnessed the
23 testing he did?

24 A. He walked me through the exact protocol
25 and process using the MIC2000 machine.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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EXHIBIT C

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC.,
HERSHEY CREAMERY COMPANY and
PAUL MILLS d/b/a MILLS BROTHERS
MARKETS,

Defendant.

Case No. C.A. No. 14-1270-GMS

**PLAINTIFF F'REAL FOOD LLC 'S RESPONSES TO DEFENDANT
HAMILTON BEACH BRANDS, INC.'S FIRST REQUEST FOR
PRODUCTION OF DOCUMENTS AND THINGS**

Pursuant to Rules 26 and 34 of the Federal Rules of Civil Procedure, Plaintiff f'real Foods LLC ("f'real" or "Plaintiff"), by the undersigned counsel, hereby objects and responds as follows to "Defendant Hamilton Beach Brands, Inc.'s First Request For Production Of Documents And Things To Plaintiff F'Real Foods, LLC."

GENERAL OBJECTIONS

The following General Objections form a part of, and are hereby incorporated into, the response to each and every request set forth below. Nothing in those responses, including any failure to recite a specific objection in response to a particular request, should be construed as a waiver of any of these General Objections.

1. f'real objects to each request to the extent that it seeks information (including electronically stored information) or documents that are already in the possession, custody, or control of either Hamilton Beach Brands, Inc. ("Hamilton Beach") or counsel for Hamilton Beach or to the

extent that it requests information or documents that are in the public domain and are of no greater burden for Hamilton Beach to obtain than f̄real.

2. f̄real objects to each request, definition, and instruction to the extent it attempts to impose any duties on f̄real beyond those affirmatively imposed by the Court, the Local Rules of the United States District Court for the District of Delaware, the Federal Rules of Civil Procedure, or any other applicable rule, law, doctrine, or accepted practice.

3. f̄real objects to each request, definition, and instruction to the extent it seeks any document or electronically stored information that is not within the possession, custody, or control of f̄real.

4. f̄real objects to each request, definition, and instruction to the extent it seeks “any” or “all” documents and electronically stored information responsive to the request. Such demands are unduly burdensome and overly broad, and they seek documents and electronically stored information that are not relevant to the claim or defense of any party nor reasonably calculated to lead to the discovery of admissible evidence. Where f̄real offers to produce responsive documents, f̄real will use reasonable diligence to locate documents in its possession, custody, or control based on a reasonable search of those files in which such information or documents ordinarily would be found and of files of those employees whom f̄real reasonably believes are most likely to have responsive documents and/or information about the specific matters at issue. f̄real construes the requests only to require the production of such responsive documents or information.

5. f̄real objects to each request, definition, and instruction as overly broad and unduly burdensome to the extent it purports to require f̄real to search for and produce large volumes of electronic documents or electronically stored information without reasonable limitations upon the scope of information to be searched or the content of the material to be searched for. f̄real will work

in good faith with Hamilton Beach to reach an agreement regarding the scope and content of electronic discovery so as to minimize the burden and expense on all parties.

6. The responses given herein, or the production of documents and/or electronically stored information by f'real in response to any one or more of the requests for production, shall not be deemed to waive any claim of privilege or immunity that f'real may have as to any response, document or information, or any objection that f'real may have as to a demand for further response to these or other requests. f'real may, for its sole convenience, produce documents and/or information in response to a request without agreeing that other, similar documents or information in its possession, custody, or control are responsive and without waiving any objections it may have to the production of such documents or information.

7. In furnishing these objections and responses to the requests and in producing documents and electronically stored information in response to the requests, f'real does not admit or concede the relevance, materiality, authenticity, or admissibility in evidence of any such request, document, or electronically stored information. All objections to the use, at trial or otherwise, of any document produced or information provided in response to the requests and to any further production are hereby expressly reserved.

8. f'real objects to each request, definition, or instruction as overly broad, unduly burdensome, oppressive, and not reasonably calculated to lead to the discovery of admissible evidence to the extent it seeks or purports to seek documents and/or electronically stored information relating to subject matters other than the patent and trademark infringement claims at issue in this action.

9. f'real's statements that it will produce documents in response to a particular request do not mean that it has any such documents, and its response should not be construed in such a manner. Where f'real responds that it will produce responsive documents, it means that it will produce those documents that exist and are located after a reasonably diligent search.

10. f'real objects to each request, definition, and instruction to the extent it uses language incorporating or calling for a legal conclusion or making an erroneous statement of law. f'real's responses herein shall be as to matters of fact only, and shall not be construed as stating or implying any conclusions of law concerning the matters referenced in any discovery request or concerning any matter relevant to this litigation.

11. f'real objects to each discovery request, definition, or instruction to the extent it prematurely seeks production of information to be provided during expert discovery.

12. f'real objects to each request to the extent it seeks documents or electronically stored information relating to any confidential pending patent application because such requests call for documents and information not relevant to any claim or defense in this action. Hamilton Beach has not made and cannot make a particularized showing of relevancy that outweighs f'real's interest in maintaining the confidentiality of such documents and information, if any, which may exist. f'real will not produce such documents or information, and f'real's responses should be read to exclude the production of such documents and information.

13. f'real objects to each request to the extent it calls for the production of documents or disclosure of electronically stored information protected by any privilege, including, without limitation, the attorney-client privilege, the work product doctrine or any other available and valid grounds for withholding documents and electronically stored information from production. All requests have been read to exclude the discovery and/or production of such privileged information and documents, and any indication by f'real that it will produce documents or electronically stored information, including in these responses, shall be read to exclude the production of such privileged documents and information. Any inadvertent discovery and/or production of privileged documents and/or information shall not, pursuant to any applicable Protective Order entered by the Court and Federal Rule of Evidence 502, constitute a waiver of any privilege. f'real will comply with the

Federal Rules of Civil Procedure and the Local Rules of the United States District Court for the District of Delaware in identifying privileged material, but f'real specifically objects to identifying on a privilege log communications between f'real and its litigation counsel or documents that were created subsequent to the filing of f'real's Complaint in this action on October 3, 2014. f'real further objects to logging any privileged documents created after October 3, 2014 on the grounds that logging them would be unduly burdensome and, for that reason, f'real will not log such documents.

14. f'real objects to each request to the extent that it seeks information, documents, or things containing private, confidential, secret, trade secret, proprietary, and/or sensitive business information of f'real, its employees, and/or third parties (hereinafter referred to as "Confidential Information"). f'real will not produce Confidential Information to the extent f'real is under any obligation – whether imposed by a third party, court, tribunal, legislature, or any other body with authority to impose or enforce such an agreement, or by any statute, regulation, or order – to maintain it in confidence and not disclose it, and all of f'real's responses should be read to exclude the production of such information. In addition, f'real will not produce Confidential Information, and will redact Confidential Information from documents and electronically stored information that it produces, to the extent such Confidential Information is not relevant to any claim or defense in this action nor reasonably calculated to lead to the discovery of admissible evidence. f'real will only produce other Confidential Information pursuant to an appropriate protective order entered in this action.

15. f'real objects to Hamilton Beach's definition of "f'real", "Plaintiff", "You" and "Your" as overly broad to the extent it refers to the predecessors, predecessors-in-interest, subsidiaries, parents and affiliates of f'real. As defined above, "f'real" or "plaintiff" refers to the Plaintiff f'real Foods, LLC. Documents and electronically stored information in the possession, custody, or control of f'real's predecessors, predecessors-in-interest, subsidiaries, parents and affiliates are not necessarily in the possession, custody, or control of f'real, and f'real will not construe the requests to require

production of such documents or electronically stored information to the extent they are not in the possession, custody, or control of f̄real.

16. f̄real objects to Hamilton Beach’s definition of “Competing Product” as vague, ambiguous and overbroad, particularly with respect to the word “competes.” f̄real is in the business of selling frozen milkshakes and smoothies that are prepared using its patented blender. From Hamilton Beach’s discovery responses, f̄real understands Hamilton Beach to be in the business of selling blenders.

17. f̄real objects to Hamilton Beach’s definition of “f̄real Covered Product” as vague, ambiguous and overbroad, particularly with respect to the expressions “component of a system” and “used to practice any method.” Moreover, f̄real further objects to this definition to the extent it requires interpretation of claim terms that have not yet been construed by the Court, the meaning of which may be disputed by the parties. To the extent there is any dispute between the parties about the meaning of claim terms in the Patents-in-Suit, Hamilton Beach’s definition of “f̄real Covered Product” improperly calls for a legal conclusion.

18. Notwithstanding any other portion of these responses, f̄real objects to producing any document generated following the date on which Hamilton Beach served its requests for production as unduly burdensome.

19. f̄real expressly reserves the right to supplement these General Objections.

RESPONSES TO DOCUMENT REQUESTS

REQUEST FOR PRODUCTION NO. 1:

If Plaintiff contends that it sells a f̄real Covered Product and/or Competing Product, documents and things sufficient to evidence its method of distribution or sale, and places of distribution or sale.

RESPONSE TO REQUEST NO. 1:

freal incorporates each general objection as though fully set forth in response to this request.

freal further objects to the phrase “method of distribution or sale, and places of distribution or sale” as vague and ambiguous.

As freal understands this request, Hamilton Beach is requesting identification of the locations where freal’s milkshake and smoothie products can be purchased. Without waiving its objections, freal responds that these locations can be found by going to freal’s website (<http://www.freal.com/>), clicking on the red “FIND A F’REAL” tab (<http://www.freal.com/find-a-freal/>), entering in the desired location’s zip code and then clicking on the “SEARCH” button. The freal website then provides an identification of the closest freal retailers, including their addresses, and a map of where those retailers are located.

REQUEST FOR PRODUCTION NO. 2:

The product specifications for any freal Covered Product and/or Competing Product, including, without limitation any blueprints, CAD files, drawings or other documents containing such specifications.

RESPONSE TO REQUEST NO. 2:

freal incorporates each general objection as though fully set forth in response to this request.

freal further objects to this request as overbroad and unduly burdensome to the extent it seeks “any” blueprints, CAD files, drawings or other documents containing technical information about freal’s products. There are thousands of such documents, the vast majority of which have no relevance to this action. Moreover, freal’s CAD files are inaccessible unless they are displayed using a proprietary CAD software package.

freal additionally objects to this request to the extent it requires production of highly confidential technical information. freal will only produce confidential technical information

pursuant to an appropriate protective order entered in this action.

Moreover, f̄real objects to this request as seeking information that is not relevant to any claim or defense in this case or reasonably calculated to lead to the discovery of admissible evidence to the extent it seeks production of f̄real technical information for any f̄real products that are currently under development, planned for development at some point in the future or that may be unrelated to the patented technology at issue.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents in its possession, custody or control that show the configuration of its current and past products practicing the inventions claimed in the Patents-in-Suit to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 3:

Representative physical samples of any Competing Product.

RESPONSE TO REQUEST NO. 3:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objection to the term “Competing Product” as vague, ambiguous and overbroad.

f̄real additionally objects to this request to the extent it requires f̄real to give Hamilton Beach an expensive f̄real blender or disclose confidential f̄real technology to Hamilton Beach.

Without waiving its objections and to the extent f̄real understands this request as seeking to allow authorized representatives of Hamilton Beach to inspect a f̄real blender which practices f̄real’s patented inventions, f̄real is willing to allow authorized Hamilton Beach representatives to inspect a f̄real blender at a mutually agreeable time and place pursuant to the provisions of an appropriate protective order entered in this action and as part of a reciprocal inspection of the parties’ relevant products.

REQUEST FOR PRODUCTION NO. 4:

Representative physical samples of any f̄real Covered Product.

RESPONSE TO REQUEST NO. 4:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objection to the term “f̄real Covered Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real additionally objects to this request to the extent it requires f̄real to give Hamilton Beach an expensive f̄real blender or disclose confidential f̄real technology to Hamilton Beach.

Without waiving its objections and to the extent f̄real understands that this request as seeking to allow authorized representatives of Hamilton Beach to inspect a f̄real blender which practices f̄real’s patented inventions, f̄real is willing to allow authorized Hamilton Beach representatives to inspect a f̄real blender at a mutually agreeable time and place pursuant to the provisions of an appropriate protective order entered in this action and as part of a reciprocal inspection of the parties’ relevant products.

REQUEST FOR PRODUCTION NO. 5:

All documents and things concerning the advertising, marketing or promotion of any f̄real Covered Product and/or Competing Product, including without limitation all business plans, sales forecasts, marketing plans, brochures, advertisements, or trade materials and specifications used or intended for use as promotional or informational literature.

RESPONSE TO REQUEST NO. 5:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real further objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” such documents.

f̄real additionally objects to this request to the extent it requires production of highly confidential business information, particularly f̄real's business plans, sales forecasts and marketing plans. The commercial sensitivity of these forward looking documents greatly outweighs the probative value, if any, that such documents might have.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged brochures, advertisements, or trade materials and specifications used or intended for use as promotional or informational literature for f̄real's products in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 6:

Documents and things sufficient to evidence f̄real's projection of sales of any f̄real Covered Product and/or Competing Product in the United States.

RESPONSE TO REQUEST NO. 6:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms "f̄real Covered Product" and "Competing Product" as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real additionally objects to this Request as irrelevant, not reasonably calculated to lead to the discovery of admissible information and requiring production of highly confidential business information. The commercial sensitivity of f̄real's forward looking sales projections greatly outweighs the probative value, if any, that such documents might have.

REQUEST FOR PRODUCTION NO. 7:

All documents and things concerning the Patents-In-Suit, including without limitations:

- (a) All correspondence or communications with any person concerning the Patents-In-Suit;

(b) All memoranda concerning the Patents-In-Suit;

(c) All documents and things concerning the validity, infringement and enforceability of any claim in the Patents-In-Suit, including without limitation any consideration, discussion, communication, or investigation of the validity, enforceability or any present or future infringement by any person or entity of any of the claims of the Patents-In-Suit;

(d) All documents and things concerning any opinions, reports or memoranda, either legal or non-legal, written or oral, prepared by, on behalf of or at the request of, or otherwise presented to, f̄real or any of its Affiliates, or of which f̄real or any of its Affiliates was aware, concerning any of the claims of the Patents-In-Suit, including without limitation opinions, reports and memoranda concerning the validity, enforceability or purported infringement by Hamilton Beach of any of the claims in the Patents-In-Suit; and

(e) All documents and things concerning any prior art searches with respect to any of the Patents-In-Suit.

RESPONSE TO REQUEST NO. 7:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

f̄real additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” such documents.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 8:

All organization charts and personnel lists for each department or group involved in the research, design, development, testing, clinical evaluation, manufacture, planned sale, actual sale, distribution, marketing, advertising or promotion of any f real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 8:

f real incorporates each general objection as though fully set forth in response to this request.

f real reiterates its objections to the terms “f real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f real further objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” organizational charts and personnel lists for each of the described activities.

Nonetheless, without waiving its objections, f real will, pursuant to the terms of a protective order, produce relevant, non-privileged organization charts and personnel lists in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 9:

Documents and things sufficient to identify each person or entity hired or engaged by f real in any capacity in connection with the research, development, testing, design, manufacture, marketing, sale, advertising or promotion of any f real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 9:

f real incorporates each general objection as though fully set forth in response to this request.

f real reiterates its objections to the terms “f real Covered Product” and “Competing Product”

as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged organization charts and personnel lists in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 10:

All documents and things concerning f̄real's contention that Hamilton Beach is infringing any claim of the Patents-in-Suit.

RESPONSE TO REQUEST NO. 10:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged pictures of the infringing “Shake Shop Express” kiosks in its possession, custody or control taken before the filing of f̄real’s complaint.

REQUEST FOR PRODUCTION NO. 11:

Concerning any blender or mixer made, used, sold, had made, offered for sale, or imported into the United States by f̄real from October, 2008 to the present that has a liquid dispenser, all documents and things related to the liquid dispenser.

RESPONSE TO REQUEST NO. 11:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real additionally objects to this request as overbroad and not reasonably calculated to lead to

the discovery of admissible evidence, particularly to the extent it seeks “all” such documents and to the extent it seeks documents dated “from October, 2008” to the present – which is long after U.S. Patent No. 5,803,377 issued.

f^{real} further objects to this request to the extent it requires interpretation of claim terms that have yet to be construed by the Court, the meaning of which may be disputed by the parties.

Nonetheless, without waiving its objections and to the extent it understands this request, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 12:

Concerning any blender or mixer made, used, sold, had made, offered for sale, or imported into the United States by f^{real} from October, 2008 to the present that has a moveable splash shield and a nozzle that is capable of directing fluid onto that splash shield, all documents and things related to the moveable splash shield and a nozzle that is capable of directing fluid onto that splash shield.

RESPONSE TO REQUEST NO. 12:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” such documents and to the extent it seeks documents dated “from October, 2008” to the present – which is long after the priority application filing date for U.S. Patent Nos. 7,144,150; 7,520,658 and 7,520,662.

f^{real} further objects to this request to the extent it requires interpretation of claim terms that have yet to be construed by the Court, the meaning of which may be disputed by the parties.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order and to the extent it understands this request, produce relevant, non-privileged responsive documents in its possession, custody or control to the extent such documents exist and can be located

after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 13:

All documents and things concerning any blender or mixer made, used, sold, had made, offered for sale, or imported into the United States on or before May 17, 1996, that has a liquid dispenser.

RESPONSE TO REQUEST NO. 13:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” such documents.

f^{real} further objects to this request to the extent it requires interpretation of claim terms that have yet to be construed by the Court, the meaning of which may be disputed by the parties.

Without waiving its objections and to the extent it understands the request, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 14:

All documents and things concerning any blender or mixer made, used, sold, had made, offered for sale, or imported into the United States on or before November 15, 2002, that has a moveable splash shield and a nozzle that is capable of directing fluid onto that splash shield.

RESPONSE TO REQUEST NO. 14:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” such documents.

f^{real} further objects to this request to the extent it requires interpretation of claim terms that

have yet to be construed by the Court, the meaning of which may be disputed by the parties.

Without waiving its objections and to the extent it understands the request, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 15:

All documents and things concerning, and resulting from, any search or investigation of the prior art ever made by f^{real}, or any other person or entity hired by f^{real} to perform any search or investigation of the prior art, in connection with the Patents-in-Suit.

RESPONSE TO REQUEST NO. 15:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its patent attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control that can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 16:

All documents and things concerning any attempt to obtain patent protection in any country with regard to any f^{real} Covered Products and/or Competing Products.

RESPONSE TO REQUEST NO. 16:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} reiterates its objections to the terms “f^{real} Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its patent attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control pertaining to international counterparts of the Patents-in-Suit that can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 17:

All documents and things concerning any licensing, attempts to license, or any discussion regarding the negotiations, preparation, execution, performance, terms, or conditions of any license relating to the Patents-in-Suit.

RESPONSE TO REQUEST NO. 17:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control that can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 18:

All documents and things concerning any licensing, attempts to license, or any discussion regarding the negotiations, preparation, execution, performance, terms, or conditions of any license relating to any patent covering any f^{real} Covered Product and/or Competing Product or the practice of using such any f^{real} Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 18:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} reiterates its objections to the terms “f^{real} Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its patent attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control pertaining to licensing efforts for the Patents-in-Suit that can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 19:

All documents and things concerning the first use, sale, or offer to sell, any product or systems covered by any claim of the Patents-in-Suit.

RESPONSE TO REQUEST NO. 19:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly to the extent it seeks “all” such documents.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control that can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 20:

All documents and things concerning the alleged novelty and non-obviousness, or lack thereof, of the inventions claimed in the Patents-in-Suit.

RESPONSE TO REQUEST NO. 20:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} further objects to this request as vague and ambiguous to the extent it refers to the “alleged novelty and non-obviousness, or lack thereof, of the inventions claimed in the Patents-in-Suit.”

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents pertaining to the conception, reduction to practice and commercial success of inventions set forth in the Patents-in-Suit that are in f^{real}’s possession, custody or control and can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 21:

All documents and things concerning any communication between f^{real} and any person concerning the Patents-in-Suit.

RESPONSE TO REQUEST NO. 21:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} additionally objects to this request as overbroad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence, particularly with respect to the phrases “all” and “concerning the Patents-in-Suit.”

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective

order, produce relevant, non-privileged responsive documents pertaining to the prosecution of the Patents-in-Suit and f̄real's efforts to license the Patents-in-Suit that are in f̄real's possession, custody or control and can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 22:

All documents and things concerning any communication between f̄real and any person concerning patent applications related to the Patents-in-Suit.

RESPONSE TO REQUEST NO. 22:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence, particularly with respect to the phrases "all" and "concerning patent applications related to the Patents-in-Suit."

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents pertaining to the prosecution of the Patents-in-Suit that are in f̄real's possession, custody or control and can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 23:

All documents and things concerning any communication between f̄real and any person related to any f̄real patent for any f̄real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 23:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms “f̄real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real additionally objects to this request as overbroad and not reasonably calculated to lead to the discovery of admissible evidence to the extent it seeks discovery concerning f̄real patents other than f̄real’s Patents-in-Suit.

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents in its possession, custody or control pertaining to the prosecution and licensing of the Patents-in-Suit that can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 24:

All documents and things concerning any f̄real document retention policy or program, past or present, that covers any document responsive to these requests.

RESPONSE TO REQUEST NO. 24:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real further objects to this request as vague, ambiguous and overbroad, particularly in its use of the word “covers” and the phrase “any document responsive to these requests.”

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged responsive documents its possession, custody or control to the extent such documents exist and can be found after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 25:

All documents and things concerning any press release or public statement by f̄real concerning this lawsuit.

RESPONSE TO REQUEST NO. 25:

f̄real incorporates each general objection as though fully set forth in response to this request.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 26:

All documents and things, including any minutes and notes, relating to any meetings of directors or officers of f̄real in which any of the following were discussed: (a) the Patents-in-Suit; (b) this lawsuit; or (c) Hamilton Beach.

RESPONSE TO REQUEST NO. 26:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real further objects to this request as vague, ambiguous, overbroad and not reasonably calculated to lead to the discovery of admissible evidence.

f̄real additionally objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce pursuant relevant, non-privileged, responsive documents in its possession, custody or control pertaining to any f̄real Board of Directors meetings to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 27:

All documents and things concerning your interpretation of any claim term(s) of the Patents-in-Suit, including claim charts, and all documents and things that you intend to rely on to support any claim construction asserted in this case

RESPONSE TO REQUEST NO. 27:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its attorneys.

f^{real} additionally objects to this request as overbroad and unduly burdensome to the extent it seeks “all” documents related to claim construction.

Moreover, f^{real} objects to this request as premature because Hamilton Beach has not yet provided its Invalidity Contentions. Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce pursuant relevant, non-privileged, responsive documents in its possession, custody or control in accordance with the Court’s claim construction procedures to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 28:

All documents and things concerning what f^{real} contends would be a reasonable royalty in this case in accordance with 35 U.S.C. § 284, including all documents on any of the factors set forth in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 308 F.Supp. 1116 (S.D.N.Y. 1970), as applied to the facts of this action.

RESPONSE TO REQUEST NO. 28:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and

attorney work product communications between f̄real and its attorneys.

f̄real additionally objects to this request as overbroad and unduly burdensome to the extent it seeks “all” documents related to a reasonable royalty.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce pursuant relevant, non-privileged, responsive documents in its possession, custody or control in accordance with the Court’s expert damage report procedures to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 29:

Documents and things sufficient to determine f̄real’s accounting methods for sales, cost allocation, and profits related to any f̄real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 29:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms “f̄real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

Additionally, f̄real objects to the term “accounting methods” as vague and ambiguous.

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce pursuant relevant, non-privileged, responsive documents in its possession, custody or control in accordance with the Court’s expert damage report procedures to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 30:

All documents and things concerning any f̄real Covered Product and/or Competing Product that provides an analysis of:

- (a) anticipated and actual gross profit from manufacture, use, or sale of Competing Products;
- (b) anticipated and actual net profit from manufacture, use, or sale of f̄real Covered Products and/or Competing Products;
- (c) anticipated and actual cost of manufacture of f̄real Covered Products and/or Competing Products;
- (d) anticipated and actual variable costs of f̄real Covered Products and/or Competing Products;
- (e) anticipated and actual fixed costs of f̄real Covered Products and/or Competing Products;
- (f) anticipated and actual standard costs of f̄real Covered Products and/or Competing Products;
- (g) anticipated and actual dollar sales of f̄real Covered Products and/or Competing Products;
- (h) anticipated and actual unit sales of f̄real Covered Products and/or Competing Products;
- (i) anticipated and actual manufacturing capacity for f̄real Covered Products and/or Competing Products; and
- (j) anticipated and actual marketing capacity for f̄real Covered Products and/or Competing Products.

RESPONSE TO REQUEST NO. 30:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms “f̄real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real additionally objects to providing “anticipated” sales and profit information as irrelevant,

unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents in its possession, custody or control in accordance with the Court's expert damage report procedures to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 31:

All presentations concerning any f^{real} Covered Product and/or Competing Product, including any presentation related to the sale of f^{real} to Rich Products Corporation.

RESPONSE TO REQUEST NO. 31:

f^{real} incorporates each general objection as though fully set forth in response to this request.

f^{real} reiterates its objections to the terms "f^{real} Covered Product" and "Competing Product" as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f^{real} additionally objects to this request as irrelevant, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

f^{real} further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f^{real} and its attorneys.

Nonetheless, without waiving its objections, f^{real} will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 32:

All documents and things related to any valuation of Patents-in-suit.

RESPONSE TO REQUEST NO. 32:

f real incorporates each general objection as though fully set forth in response to this request.

f real additionally objects to the term “valuation” as vague and ambiguous.

f real further objects to this Request as impermissibly seeking attorney-client privilege and attorney work product communications between f real and its attorneys.

Nonetheless, without waiving its objections, f real will, pursuant to the terms of a protective order and to the extent it understands Hamilton Beach’s request, produce relevant, non-privileged, responsive documents in its possession, custody or control in accordance with the Court’s expert damage report procedures to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 33:

All documents and things concerning package inserts, labeling, or packaging used in connection with any f real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 33:

f real incorporates each general objection as though fully set forth in response to this request.

f real reiterates its objections to the terms “f real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

Nonetheless, without waiving its objections, f real will, pursuant to the terms of a protective order and to the extent it understands Hamilton Beach’s request, produce pursuant relevant, non-privileged, responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 34:

All documents and things concerning instructions for assembly or use of any f real Covered Product and/or Competing Product, including all training manuals and instructional manuals

RESPONSE TO REQUEST NO. 34:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms “f̄real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order and to the extent it understands Hamilton Beach’s request, produce relevant, non-privileged, responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 35:

All documents and things concerning the competitive positions, strengths and weaknesses, or advantages and disadvantages of any f̄real Covered Product and/or Competing Product, including any analysis of such f̄real Covered Products and/or Competing Product provided to f̄real.

RESPONSE TO REQUEST NO. 35:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms “f̄real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real further objects to the term “any analysis” as vague, ambiguous and not reasonably calculated to lead to the discovery of admissible evidence.

f̄real additionally objects to this request to the extent it impermissibly seeks attorney-client privilege and attorney work product communications between f̄real and its attorneys.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged promotional or informational literature discussing the competitive positions, strengths and weaknesses, or advantages and disadvantages of f̄real’s products in its possession, custody or control to the extent such documents exist and can be located after a

reasonably diligent search.

REQUEST FOR PRODUCTION NO. 36:

All of f̄real annual reports from 2008 to the present.

RESPONSE TO REQUEST NO. 36:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real objects to the expression “annual report” as vague and ambiguous.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order and to the extent it understands Hamilton Beach’s request, produce relevant, non-privileged, responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 37:

All documents and things concerning economic projections or any economic analyses concerning any f̄real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 37:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms “f̄real Covered Product” and “Competing Product” as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real additionally objects to providing f̄real’s economic “projections” and “analyses” as irrelevant, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

REQUEST FOR PRODUCTION NO. 38:

All documents and things concerning the May 26, 2010 "Patent License Agreement" between f̄real and Hamilton Beach, including documents related to discussions with Peter Mikhail.

RESPONSE TO REQUEST NO. 38:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f̄real and its attorneys.

f̄real additionally objects to this request as overbroad and unduly burdensome to the extent it seeks "all" documents related to f̄real's patent license agreement with Hamilton Beach.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 39:

All documents and things concerning any contracts or other agreements between f̄real and any third party related to any f̄real Covered Product and/or Competing Product.

RESPONSE TO REQUEST NO. 39:

f̄real incorporates each general objection as though fully set forth in response to this request.

f̄real reiterates its objections to the terms "f̄real Covered Product" and "Competing Product" as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f̄real further objects to the expression "any contracts or other agreements" as vague, ambiguous, overbroad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

Nonetheless, without waiving its objections, f̄real will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents related to patent licensing negotiations in its possession, custody or control to the extent such documents exist and can be located after a

reasonably diligent search.

REQUEST FOR PRODUCTION NO. 40:

Documents and things sufficient to identify to whom f'real Covered Products and/or Competing Products are sold to and in what quantities.

RESPONSE TO REQUEST NO. 40:

f'real incorporates each general objection as though fully set forth in response to this request.

f'real reiterates its objections to the terms "f'real Covered Product" and "Competing Product" as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

With respect to who f'real's products are sold to, f'real responds that these retail locations can be found by going to f'real's website (<http://www.freal.com/>), clicking on the red "FIND A F'REAL" tab (<http://www.freal.com/find-a-freal/>), entering in the desired location zip code and then clicking on the "SEARCH" button. The f'real website then provides an identification of the closest f'real retailers, including their addresses, and a map of where those retailers are located. With respect to the sales volume of f'real's milkshake and smoothie products, f'real will, without waiving its objections and pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents evidencing such sales volume in its possession, custody or control to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 41:

All documents and things concerning f'real's current inventories of real Covered Products and/or Competing Products.

RESPONSE TO REQUEST NO. 41:

f'real incorporates each general objection as though fully set forth in response to this request.

f'real reiterates its objections to the terms "f'real Covered Product" and "Competing Product" as vague, ambiguous, overbroad and potentially calling for a legal conclusion.

f'real further objects to this request as overbroad and not likely to lead to the discovery of admissible evidence.

Nonetheless, without waiving its objections, f'real will, pursuant to the terms of a protective order, produce pursuant relevant, non-privileged, responsive documents in its possession, custody or control evidencing its current inventory of frozen milkshakes and smoothies to the extent such documents exist and can be located after a reasonably diligent search.

REQUEST FOR PRODUCTION NO. 42:

All documents and things concerning any advice of counsel with respect to the Patents-In-Suit.

RESPONSE TO REQUEST NO. 42:

f'real incorporates each general objection as though fully set forth in response to this request.

f'real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f'real and its attorneys.

f'real additionally objects to this request as irrelevant and not reasonably calculated to lead to discovery of admissible evidence since f'real is not the party being accused of patent infringement in this action.

REQUEST FOR PRODUCTION NO. 43:

All documents and things concerning Hamilton Beach or Hershey Creamery.

RESPONSE TO REQUEST NO. 43:

f'real incorporates each general objection as though fully set forth in response to this request.

f'real further objects to this request as impermissibly seeking attorney-client privilege and attorney work product communications between f'real and its attorneys.

f'real further objects to this request as overbroad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence to the extent it seeks information unrelated

to the patent and trademark infringement claims at issue in this action.

Nonetheless, without waiving its objections, F'real will, pursuant to the terms of a protective order, produce relevant, non-privileged, responsive documents in its possession, custody or control related to the patent and trademark infringement claims at issue in this action to the extent such documents exist and can be located after a reasonably diligent search.

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Attorneys for Plaintiff F'real Foods LLC

February 27, 2015

CERTIFICATE OF SERVICE

I hereby certify that on February 27, 2015, copies of the foregoing were caused to be served upon the following in the manner indicated:

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Hercules Plaza, 6th Floor
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*Attorneys for Defendants Hamilton Beach
Brands, Inc., Hershey Creamery Company and
Paul Mills d/b/a Mills Brothers Markets*

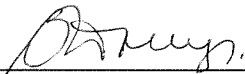
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Brenda Dolly

8455-35\2351875v1

EXHIBIT D

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,

Plaintiff,

v.

HAMILTON BEACH BRANDS, INC.,
HERSHEY CREAMERY COMPANY and
PAUL MILLS d/b/a MILLS BROTHERS
MARKETS,

Defendant.

HIGHLY CONFIDENTIAL

C.A. No. 14-1270-GMS

**PLAINTIFF F'REAL FOOD LLC'S *AMENDED* RESPONSES TO DEFENDANT
HAMILTON BEACH BRANDS, INC.'S FIRST
SET OF INTERROGATORIES TO PLAINTIFF (NOS. 1-11)**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, and consistent with the Parties' meet and confer discussions, Plaintiff f'real Foods LLC ("f'real" or "Plaintiff"), by the undersigned counsel, hereby submits these objections and amended responses to "Defendant Hamilton Beach Brands, Inc.'s First Set of Interrogatories To Plaintiff F'Real Foods, LLC. (Nos. 1-11)."

GENERAL OBJECTIONS

The following General Objections form a part of, and are hereby incorporated into, the response to each and every request set forth below. Nothing in those responses, including any failure to recite a specific objection in response to a particular request, should be construed as a waiver of any of these General Objections.

1. f'real objects to each interrogatory to the extent it seeks information that is protected from discovery or disclosure by any applicable privilege. In particular, f'real objects to Hamilton Beach's interrogatories to the extent they seek information protected from discovery by the attorney-client privilege, the work-product doctrine, common-interest privilege, and/or any other

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privilege or exemption from discovery or disclosure. Any inadvertent disclosure of privileged information does not constitute a waiver of any of these privileges.

2. f'real objects to Hamilton Beach's instructions, definitions, and each interrogatory to the extent it would require f'real to provide information beyond the scope of the discovery obligations imposed by the Federal Rules of Civil Procedure or the Local Rules of this Court.

3. f'real objects to each interrogatory as overly broad, unduly burdensome and oppressive to the extent it seeks information that is not relevant to any claim or defense in this case or reasonably calculated to lead to the discovery of admissible evidence.

4. f'real objects to each interrogatory to the extent it purports to impose duties or obligations upon f'real in excess of or different from the rules and obligations imposed by the Federal Rules of Civil Procedure, the Local Rules for the District of Delaware, and any other rules or applicable law.

5. f'real objects to each interrogatory as overbroad and unduly burdensome to the extent it is not limited to a time frame that is relevant to this litigation.

6. f'real objects to each interrogatory to the extent it seeks trade secret or confidential information of third parties to whom f'real owes a duty of confidentiality. f'real objects to producing any such information before complying with notification or other obligations owed to third parties.

7. f'real objects to each interrogatory as premature to the extent it seeks information for which there is a schedule for disclosure in this action. For example, f'real objects to each interrogatory to the extent it prematurely seeks information to be provided during expert discovery. f'real will provide such information in accordance with the Court's scheduling orders and the applicable Local Rules of this Court.

8. f̄real objects to each interrogatory as overbroad and unduly burdensome to the extent it requires f̄real to identify, without limitation, all documents, persons or things that refer or relate to a particular subject or to support a particular contention.

9. f̄real objects to each interrogatory to the extent it requests the identification of documents that are not in the possession, custody or control of f̄real. In particular, f̄real objects to the definition of the terms “f̄real”, “Plaintiff”, “you” and “your” to the extent any interrogatory uses the definition to demand information or identify documents that are not in the possession, custody or control of f̄real. In particular, f̄real is under no obligation to identify documents in the possession, custody or control of its parent company, Rich Products Corporation.

10. f̄real objects to Hamilton Beach’s definition and instructions for “Identify” and “Identity” as overbroad and unduly burdensome.

11. f̄real objects to Hamilton Beach’s interrogatories to the extent they contain multiple subparts and, thereby, exceed the numerical limits of Rule 33(a)(1) of the Federal Rules of Civil Procedure.

12. f̄real’s discovery and investigation of facts relevant to this lawsuit is ongoing. f̄real reserves the right to amend and/or supplement these responses as discovery proceeds and additional facts are uncovered.

RESPONSES TO INTERROGATORIES

INTERROGATORY NO. 1:

Identify the name and model of each and every f̄real product that you allege to be covered by or practicing any claim of the Patents-in-Suit, including f̄real systems and components that can be used to practice any of the methods recited by claims of the Patents-in-Suit (regardless of whether such f̄real systems and components are used alone or in conjunction with other f̄real products), and for each f̄real product identified, state the specific claims of the Patents-in-Suit that are allegedly covered or practiced by each model.

RESPONSE TO INTERROGATORY NO. 1:

f̄real incorporates each general objection as though fully set forth in response to this

Interrogatory.

f' real further objects to this Interrogatory as premature because the Court has not yet provided its construction of the disputed claim terms.

Without waiving its objections, f' real responds as follows:

f' real believes that f' real's B2 ("FRLB2"), B2-S ("FRLB2-S") and B4 ("FRLB4") blenders, as well as f' real's serving cup, are covered by various claims of f' real's four patents-in-suit. As presently advised and subject to revision after the Court issues its claim construction rulings, f' real's asserted claims correlate with f' real's commercial blenders and serving cups as follows:

F'REAL PATENTS	CLAIMS	F'REAL PRODUCTS COVERED
7,144,150	15	FRLB2, FRLB2-S, FRLB4
7,144,150	22	FRLB2, FRLB2-S, FRLB4
7,520,658	1	FRLB2, FRLB2-S, FRLB4
7,520,658	5	FRLB2, FRLB2-S, FRLB4
7,520,658	6	f' real serving cup, FRLB2, FRLB2-S, FRLB4
7,520,658	7	f' real serving cup, FRLB2, FRLB2-S, FRLB4
7,520,658	8	f' real serving cup, FRLB2, FRLB2-S, FRLB4
7,520,658	9	f' real serving cup, FRLB2, FRLB2-S, FRLB4
7,520,658	10	f' real serving cup, FRLB2, FRLB2-S, FRLB4
7,520,658	11	f' real serving cup, FRLB2, FRLB2-S, FRLB4
7,520,662	21	f' real serving cup, FRLB2, FRLB2-S, FRLB4
5,803,377	1	FRLB2, FRLB2-S, FRLB4
5,803,377	2	FRLB2, FRLB2-S, FRLB4
5,803,377	3	FRLB2, FRLB2-S, FRLB4

5,803,377	4	FRLB2, FRLB2-S, FRLB4
5,803,377	5	FRLB2, FRLB2-S, FRLB4
5,803,377	6	FRLB2, FRLB2-S, FRLB4
5,803,377	7	FRLB2, FRLB2-S, FRLB4
5,803,377	9	FRLB2, FRLB2-S, FRLB4
5,803,377	10	FRLB2, FRLB2-S, FRLB4
5,803,377	11	FRLB2, FRLB2-S, FRLB4
5,803,377	12	FRLB2, FRLB2-S, FRLB4
5,803,377	13	FRLB2, FRLB2-S, FRLB4
5,803,377	14	FRLB2, FRLB2-S, FRLB4
5,803,377	17	FRLB2, FRLB2-S, FRLB4
5,803,377	18	FRLB2, FRLB2-S, FRLB4
5,803,377	19	FRLB2, FRLB2-S, FRLB4
5,803,377	20	FRLB2, FRLB2-S
5,803,377	21	FRLB2, FRLB2-S
5,803,377	22	FRLB2, FRLB2-S
5,803,377	23	FRLB2, FRLB2-S, FRLB4
5,803,377	24	FRLB2, FRLB2-S, FRLB4
5,803,377	25	FRLB2, FRLB2-S, FRLB4
5,803,377	26	FRLB2, FRLB2-S, FRLB4
5,803,377	27	FRLB2, FRLB2-S, FRLB4

INTERROGATORY NO. 2:

For each f^{real} product model that you identified in response to Hamilton Beach's

Interrogatory No. 1, state whether the model has been marked with one or more of the Patents-in-Suit or marked with the address of a website where the model is associated with one or more of the Patents-in-Suit, and provide a detailed description of how each model is associated with one or more of the Patents-in-Suit, and provide a detailed description of how each model is marked that accounts for the entire period of time in which you contend the model was marked, including: (i) the specific Patents-in-Suit that each model has been marked with; (ii) the time periods in which the model has been marked with each specific Patents-in-Suit; (iii) the text the mark on each model (including any changes throughout the period of time in which the model was allegedly marked); and (iv) the specific location of each mark on each model (including any changes throughout the period of time in which the model was allegedly marked).

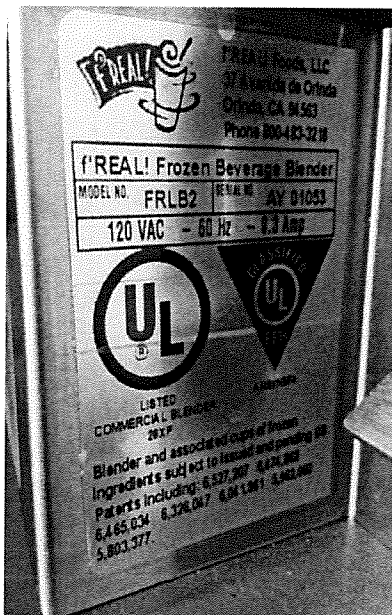
RESPONSE TO INTERROGATORY NO. 2:

f'real incorporates each general objection as though fully set forth in response to this Interrogatory.

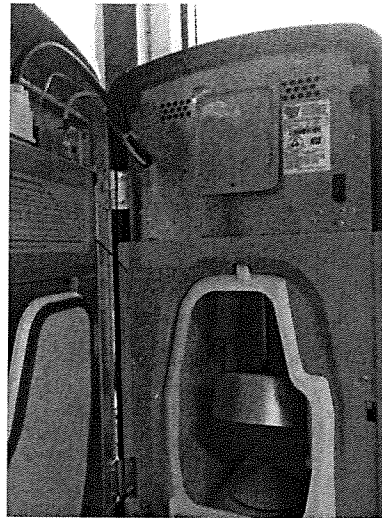
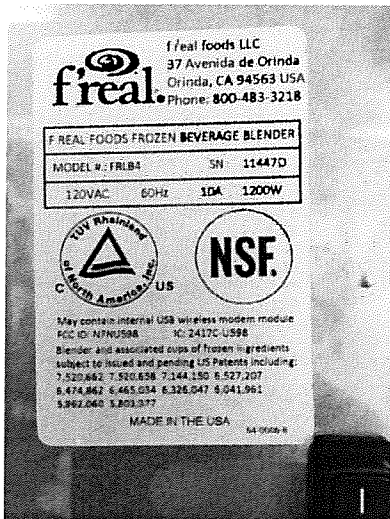
Without waiving its objections, f'real responds as follows:

f'real has marked patent-in-suit numbers on its blenders since 2003.

Presented below are representative pictures showing: (1) the nameplate of an FRLB2 blender manufactured in January 2004 that references U.S. Patent No. 5,803,377 as well as (2) the location of the nameplate on that blender:



Presented below is a representative picture showing: (1) the nameplate of an “FRLB4” blender manufactured in November 2011 with references to f’real’s U.S. Patent Nos. 7,520,662; 7,520,658; 7,144,150 and 5,803,377, as well as (2) the location of the nameplate on that blender:



Patent marking information is also provided at f’real’s website: [www.f’real.com/patents](http://www.f'real.com/patents).

INTERROGATORY NO. 3:

For each asserted claims of the Patents-in-Suit, describe the alleged conception and reduction to practice, including, but not limited to: (i) the exact dates for the conception and each reduction to practice; (ii) all documents and persons that can corroborate the conception or the reductions to practice; (iii) and each person who performed or has knowledge of the conception or the reductions to practice, including the nature of each person’s participation, involvement, or contribution to the conception or reduction to practice.

RESPONSE TO INTERROGATORY NO. 3:

f’real incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f’real responds as follows:

f’real contends that the inventions claimed in the patents-in-suit were conceived and reduced to practice at least as early as the earliest patent application filing date for each patent. For U.S. Patent No. 5,803,377, the earliest priority patent application is U.S. Patent Application Serial No. 649,534,

filed May 17, 1996. For U.S. Patent Nos. 7,144,150; 7,520,658 and 7,520,662, the earliest priority patent application is U.S. Provisional Patent Application Serial No. 60/426,662, filed November 15, 2002.

For earlier conception and reduction to practice information, f'real has already provided or will in the future provide available business records pursuant to Rule 33(d) of the Federal Rules of Civil Procedure. For example, f'real refers to the following documents that have already been provided in this action as including information pertaining to f'real's pre-filing conception and/or reduction to practice efforts: F'REAL_000325 – F'REAL_000332; F'REAL_000577 – F'REAL_000580; F'REAL_000589 – F'REAL_000591; F'REAL_000594 – F'REAL_000609; F'REAL_000635 – F'REAL_000648; F'REAL_000671 – F'REAL_000674; F'REAL_000712 – F'REAL_000723; F'REAL_000730 – F'REAL_000763.

INTERROGATORY NO. 4:

Identify all instances where f'real or Rich Products Corporation has approached a third party with an offer to license any one of the Patents-in-Suit to the third party, including a description of when, how, by whom each offer was made, whether the offer was accepted, and the identity of the third party.

RESPONSE TO INTERROGATORY NO. 4:

f'real incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f'real responds as follows:

f'real entered into a patent license with Hamilton Beach on May 26, 2010, which provided a limited field of use license to Hamilton Beach under f'real's U.S. Patent Nos. 7,144,150; 7,520,658 and 7,520,662. Hamilton Beach subsequently terminated that license pursuant to an August 2, 2011 letter from Hank Wood to Jim Farrell.

INTERROGATORY NO. 5:

Identify Erica Frank's duties in her role as Rich Products Corporation's Manager of IP, the date Erica Frank was first employed as Rich Products Corporation's Manager of IP, and each state, court, or tribunal in which Erica Frank has been admitted to practice law.

RESPONSE TO INTERROGATORY NO. 5:

f' real incorporates each general objection as though fully set forth in response to this Interrogatory.

f' real further objects to this interrogatory as harassing and not reasonably calculated to lead to the discovery of admissible evidence.

AMENDED RESPONSE TO INTERROGATORY NO. 5:

Based on f' real's further understanding of this Request through the meet and confer process with Defendants, and without waiving its objections, f' real further responds as follows:

Erica Frank's duties in her role as Rich Products Corporation's Manager of IP include managing and carrying out the development of Intellectual Property (IP) plans for technology portfolio programs and projects. Ms. Frank also works with legal counsel in IP-related activities involving contracts, potential policy changes, and legal proceedings. Ms. Frank is not a licensed attorney.

INTERROGATORY NO. 6:

To the extent that you claim Hamilton Beach's alleged infringement of the Patents-in-Suit caused f' real to lose any sales, identify the specific customer(s) that f' real allegedly lost, describe the factual bases for contending that f' real lost each customer identified, state in detail the facts and circumstances concerning any alleged loss of customer, including what efforts f' real made to sell its products to each customer, and identify any documents that support f' real's contentions.

RESPONSE TO INTERROGATORY NO. 6:

f' real incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f' real responds as follows:

f' real pioneered the self-serve, frozen milkshake and smoothie field. Prior to f' real,

milkshakes were prepared behind the counter at restaurants and fast food chains. At a restaurant, the server would often pour the milkshake ingredients into a large metal cup, hold the cup under a blender to mix the ingredients, and then pour the mixed ingredients into a glass to serve the customer. After the meal, the metal cup and glass would need to be scrubbed clean before they were reused. For fast food chains, the milkshakes and smoothies were often mixed in a large machine and, upon demand, dispensed by the server into a disposable cup, which was sold to the consumer.

During the early 1990's, f'real's founder, Mr. Jim Farrell, came up with the idea of preparing milkshakes and smoothies from high quality ingredients outside the restaurant setting, placing those milkshakes and smoothies in single serving disposable cups and then hard-freezing those single serving cups for shipment to convenience stores and fast food restaurants. The second part of Mr. Farrell's idea was designing a blender that the consumer could use on their own at the convenience store or fast food restaurant to re-constitute the milkshake to an old-fashioned texture. Through hard work and experimentation, Mr. Farrell overcame the technical barriers to taking self-serve, frozen milkshakes from a mere concept to a commercial success. Today, f'real's milkshakes, smoothies and frozen cappuccino beverage products are sold at over 13,000 locations across the United States and Canada, including convenience stores, colleges, university theaters and military bases.

By stealing f'real's patented inventions, Defendants are now competing directly and unfairly with f'real in the self-serve milkshake and smoothie field. In so doing, Defendants are taking away customers who would have otherwise gone to f'real for self-serve milkshakes and smoothies. For that reason, all of Defendants' self-serve milkshake and smoothie customers represent lost sales opportunities for f'real. The identity of those lost customers and the circumstances under which Defendants were able to steal those customers are best known by the Defendants.

INTERROGATORY NO. 7:

To the extent the Complaint claims that f'real has suffered and will continue to suffer due to Hamilton Beach's alleged infringement to the Patents-in-Suit absent injunctive relief against Hamilton Beach, state the factual basis of such contention, including a detailed explanation of: (i) how f'real will suffer an irreparable injury absent injunctive relief against Hamilton; (ii) why remedies available at law (e.g., money damages) are inadequate to compensate for f'real's alleged injury; (iii) why the balance of hardships between the parties favors f'real; and (iv) why the public interest would not be disserved.

RESPONSE TO INTERROGATORY REQUEST NO. 7:

f'real incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f'real responds as follows:

f'real pioneered the self-serve, frozen milkshake and smoothie field. Prior to f'real, milkshakes were prepared behind the counter at restaurants and fast food chains. At a restaurant, the server would often pour the milkshake ingredients into a large metal cup, hold the cup under a blender to mix the ingredients, and then pour the mixed ingredients into a glass to serve the customer. After the meal, the metal cup and glass would need to be scrubbed clean before they were reused. For fast food chains, the milkshakes and smoothies were often mixed in a large machine and, upon demand, dispensed by the server into a disposable cup, which was sold to the consumer.

During the early 1990's, f'real's founder, Mr. Jim Farrell, came up with the idea of preparing milkshakes and smoothies from high quality ingredients outside the restaurant setting, placing those milkshakes and smoothies in single serving disposable cups and then hard-freezing those single serving cups for shipment to convenience stores and fast food restaurants. The second part of Mr. Farrell's idea was designing a blender that the consumer could use on their own at the convenience store or fast food restaurant to re-constitute the milkshake to an old-fashioned texture. Through hard work and experimentation, Mr. Farrell overcame the technical barriers to taking self-serve, frozen milkshakes from a mere concept to a commercial success. Today, f'real's milkshakes, smoothies and

frozen cappuccino beverage products are sold at over 13,000 locations across the United States and Canada, including convenience stores, colleges, university theaters and military bases.

By stealing f'real's patented inventions, Defendants are now competing directly and unfairly with f'real in the self-serve milkshake and smoothie field. In so doing, Defendants are taking away customers who would have otherwise gone to f'real for self-serve milkshakes and smoothies. By losing those customers, f'real is suffering irreparable injury by being unable to develop the goodwill of those customers and by being unable to grow f'real's business as it would have done if f'real's patent rights were being respected.

INTERROGATORY NO. 8:

Identify all instances where f'real claims to have witnessed a single individual perform every step of an asserted method claim of the Patents-in-Suit (including, but not limited to, claim 21 of the '662 patent and claim 6 of the '658 patent), including a description of when, where, and how each alleged instance occurred, and the identify of all witnesses to each alleged instance.

RESPONSE TO INTERROGATORY NO. 8:

f'real incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f'real responds as follows:

f'real's method claims have been repeatedly infringed by Defendants at trade shows, including the following trade shows:

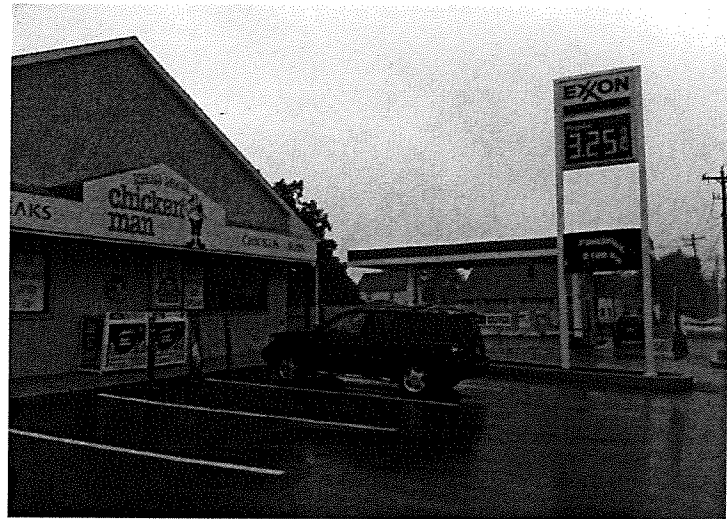
DATE	TRADE SHOW	LOCATION	HERSHEY ATTENDEE
Oct. 14-16, 2013	NACS	Atlanta, GA	Tom Holder
Mar. 8-9, 2014	Ocean City Tradeshow	Ocean City, MD	
Mar. 19, 2014	NECSA – New England Convenience Store Assn.	Worcester, MA	
Apr. 1-3, 2014	M-Pact Show	Indianapolis, IN	
Apr. 22-23, 2014	Layman's Trade Show	Salem, VA	

May 15, 2014	NYACS – New York Convenience Store Assn.	Syracuse, NY	Jim Humphrey, Chuck Preston, Steve Jorgenson, Eric Lobus, Lamont Anderson, Matt Bleier, Clare Ferrari, Kurt Gregory, Tom Holder, Tony Griffith, Mark Scharlau, Justin Scharlau, Zach Waite
July 9-11, 2014	NACUFS National	Baltimore, MD	
Oct. 8-10, 2014	NACS	Las Vegas, NV	
Nov. 16, 2014	2014 Asian American Trade Assn.	Tampa, FL	
Mar. 3-4, 2015	Southeast Petro Show	Myrtle Beach, SC	
Mar. 9, 2015	NACUFS Regional – Mid-Atlantic	Gettysburg College, PA	
Mar. 18, 2015	NECSA – New England Convenience Store	Worcester, MA	
May 14, 2015	NYACS – New York Convenience Store	Syracuse, NY	
June 22-24, 2015	FARE	Nashville, TN	Tom Holden, Kurt Gregory, Zach Waite
July 22-24, 2015	NACUFS National	Indianapolis, IN	Tom Holder, Craig Byler, Robyn Holder, Mark Scharlau, Derek Travis, Steve Zimmer

f'real's method claims have also been repeatedly infringed by consumers of Defendants'

products at convenience stores. While f'real has not been able to observe every instance of infringement at convenience stores, f'real did observe an infringement of its method claims on September 25, 2014 between 1:30 and 2:00 p.m. A f'real representative arrived at Mills Brothers Market in Milford, Delaware. The f'real representative approached the Mills Brothers clerk, Jane, who was behind the counter and asked her for help using the Hamilton Beach milkshake blender. Jane asked what flavor the f'real representative wanted to try and the f'real representative responded "Wildberry." Jane took a frozen "Wildberry" smoothie from the display freezer, removed the lid, opened the Hamilton Beach blender and placed the smoothie cup in the cup holder. Once the cup was firmly in place and the Hamilton Beach blender door was closed, Jane pressed the "start" button. Jane explained each step as she demonstrated the process. Once the smoothie was blended, Jane removed the blended cup from the cup holder, placed a lid on the cup and handed the cup to the f'real representative. Attached below are pictures taken by f'real's representative that afternoon at Mills Brothers Market:





AMENDED RESPONSE TO INTERROGATORY NO. 8:

Based on f'real's further understanding of this Request through the meet and confer process with Defendants, and without waiving its objections, f'real further responds as follows:

The f'real representative who observed the infringement of its method claims (*i.e.*, a Mills Brothers clerk using a Hamilton Beach blender) on September 25, 2014 was Stephen Braithwaite. Neither f'real nor its counsel consent to counsel for Defendant, or any party to this action, communicating directly or indirectly with Mr. Braithwaite and do not authorize any communications otherwise prohibited by any applicable rule of professional conduct. Mr. Braithwaite should be contacted only through f'real's counsel of record in this action.

INTERROGATORY NO. 9:

Identify the factual basis for f'real's contention that "Hamilton Beach MIC2000 blenders have a splash shield . . . [that is] unrestrained against a sliding movement on the mixing shaft in a direction away from the cup opening," *see, e.g.*, Infringement Contentions for '658 Patent at 2, 4, and specifically the basis for f'real's contention that the MIC2000's splash shield is "unrestrained."

RESPONSE TO INTERROGATORY NO. 9:

f^{real} incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f^{real} responds as follows:

The MIC2000 splash shield lid has an aperture that allows it to slide upward on the mixing shaft in an unrestrained manner.

INTERROGATORY NO. 10:

Identify the factual basis for f^{real}'s contention that the Hamilton Beach MIC2000 blender includes and "aeration means for . . . causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser," *see, e.g.*, Infringement Contentions for '377 Patent at 2, including a description of any experiments that f^{real} has conducted in connection with its contention and the results of any such experiments, whether or not the results support or refute f^{real}'s contention.

RESPONSE TO INTERROGATORY NO. 10:

f^{real} incorporates each general objection as though fully set forth in response to this Interrogatory.

Without waiving its objections, f^{real} responds as follows:

The Hamilton Beach MIC2000 has a mixing blade with a curved, wave-like shape for causing air to be incorporated into the mixture of the ground frozen milkshake and dispensed water when the Hershey milkshake cup is positioned in the cup holder. To date, f^{real}'s experiments indicate that air is initially removed from the frozen Hershey milkshake when blending begins but, due to the rotational speed of the blade, the curved, wave-like shape of the blade and the multiple passes, air is then reincorporated into the milkshake by virtue of a whipping effect.

INTERROGATORY NO. 11:

Identify all third-parties (*e.g.*, attorneys, advisors, consultants, bankers) who worked for Rich Products Corporation in connection with Rich Products Corporation's acquisition of f^{real}.

RESPONSE TO INTERROGATORY NO. 11:

f^{real} incorporates each general objection as though fully set forth in response to this

Interrogatory.

f'real further objects to this interrogatory as harassing and not reasonably calculated to lead to the discovery of admissible evidence.

SIDEMAN & BANCROFT LLP

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etownsend@mnat.com

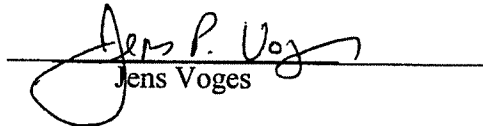
Attorneys for Plaintiff f'real Foods LLC

December 22, 2015

VERIFICATION

I, Jens Voges, declare under penalty of perjury under the laws of the United States of America that the facts set forth in the foregoing "PLAINTIFF F'REAL FOOD LLC'S *AMENDED* RESPONSES TO DEFENDANT HAMILTON BEACH BRANDS, INC.'S FIRST SET OF INTERROGATORIES TO PLAINTIFF F'REAL FOODS, LLC. (NOS. 1-11)" are true and correct to the best of my knowledge, information and belief.

Dated: 12/22/15


Jens Voges

CERTIFICATE OF SERVICE

I hereby certify that on December 23, 2015, copies of the foregoing were caused to be served upon the following in the manner indicated:

Richard L. Horwitz, Esquire
David E. Moore, Esquire
Bindu A. Palapura, Esquire
POTTER ANDERSON & CORROON LLP
1313 North Market Street
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Wilmington, DE 19801
*Attorneys for Defendants Hamilton Beach
Brands, Inc., Hershey Creamery Company and
Paul Mills d/b/a Mills Brothers Markets*

VIA ELECTRONIC MAIL

Timothy J. Nieman, Esquire
Kevin M. Gold, Esquire
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12th Floor
P.O. Box 1146
Harrisburg, PA 17108-1146
*Attorneys for Defendant Hershey Creamery
Company and Paul Mills d/b/a Mills Brothers
Markets*

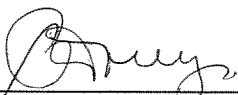
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New York, NY 10112
*Attorneys for Defendant Hamilton Beach
Brands, Inc.*

VIA ELECTRONIC MAIL



Brenda Dolly

EXHIBIT E

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (GMS)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and	)	HIGHLY CONFIDENTIAL
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**OPENING EXPERT REPORT OF
DANIEL MAYNES, Ph.D CONCERNING
INFRINGEMENT OF F'REAL'S PATENTS-IN-SUIT**

I, Daniel Maynes, declare as follows:

1. I have been retained by the attorneys for Plaintiffs f'real Foods, LLC and Rich Products Corporation (collectively "f'real" or "Plaintiffs") to serve as an expert in the fields of mechanical engineering and fluid dynamics. Based upon my expertise and my investigation of the relevant facts, I have been asked in this report to evaluate whether the production, sales, leasing and use in commerce of the accused blenders produced by Defendant Hamilton Beach Brands, Inc. ("Hamilton Beach") would infringe the asserted claims of f'real's patents-in-suit. For the reasons stated in this report, I conclude that they would.

I. Qualifications

2. I am Chairman of the Mechanical Engineering Department at Brigham Young University ("BYU") and have served in that position since 2013. I have also held numerous other professorial positions in the BYU Mechanical Engineering Department since 1997.

3. I received my Ph.D. in Mechanical Engineering from the University of Utah in 1997. Prior to that, I received an M.S. in Mechanical Engineering from Utah State University in 1993 and a B.S. in Mechanical Engineering from Utah State University in 1992.

4. My areas of expertise include microscale fluid mechanics and heat transfer, superhydrophobic surfaces, electroosmotic flow transport phenomena, turbomachinery design and analysis, turbulent mixing, turbulence induced structural vibrations, convection heat transfer and fluid mechanics applications.

5. In addition to my teaching work, I consult with industry on a broad range of mechanical engineering technologies.

6. My Curriculum Vitae, which recites my technical expertise, is submitted as attached Exhibit "A."

7. I am being compensated as an expert witness at the rate of \$300 per hour for deposition or trial testimony and \$200 per hour for all other work, plus reasonable and necessary expenses incident to my work (e.g., travel, copying, hotels, meals, parking, etc.). My compensation does not depend and has never depended on any opinion expressed in this report, in any testimony that I may give, or on the outcome of this case.

II. Materials Considered

8. I understand that f'real has asserted four patents in this case: U.S. Patent Nos. 5,803,377 ("377 patent"); 7,144,150 ("150 patent"); 7,520,658 ("658 patent") and 7,520,662 ("662 patent"). The '150, '658 and '662 patents are collectively referred to as f'real's "self-rinsing patents." The asserted claims are:

Patent	Asserted Claims
'377 patent	Claims 1-4, 6, 9, 11-14, 18-22, 25 and 27
'150 patent	Claims 15, 20 and 22
'658 patent	Claims 1, 5 and 6-11
'662 patent	Claim 21

To assess whether the accused blenders and their operation would infringe the asserted claims of f'real's patents-in-suit, I have personally inspected and operated patented f'real blenders as well as Hamilton Beach's accused MIC2000 blender. I have also reviewed numerous documents including¹:

¹ "DX" refers to deposition exhibit.

DESCRIPTION
Farrell U.S. Patent No. 5,803,377 (“’377 patent”; Williams DX5)
Ex Parte Reexamination Certificate for U.S. Patent No. 5,803,377, issued March 30, 2018
Prosecution History for Farrell U.S. Patent No. 5,803,377
Tomlinson U.S. Patent No. 3,295,997 (“Tomlinson ‘997 patent”)
Prosecution History for Reexamination of U.S. Patent No. 5,803,377
Stiffler U.S. Patent No. 3,147,958 (“Stiffler patent”; Pryor DX1)
Tomlinson U.S. Patent No. 3,154,123 (“Tomlinson ‘123 patent”)
June 7, 2017 “Declaration of Jens Voges [37 C.F.R. § 1.132]” submitted during Ex Parte Reexamination of U.S. Patent No. 5,803,377 (“’377 Voges Decl.”)
Farrell U.S. Patent No. 7,144,150 (“’150 patent”; Williams DX4)
Prosecution History for Farrell U.S. Patent No. 7,144,150
July 21, 2017 “DECISION Denying Institution of <i>Inter Partes</i> Review” for U.S. Patent No. 7,144,150 (Case IPR2017-00756)
U.S. Provisional Patent Application No. 60/426,622, filed November 15, 2002
Levine’s U.S. Patent No. 4,637,221
Harr’s U.S. Patent No. 1,090,148
Farrell U.S. Patent No. 7,520,658 (“’658 patent”; Williams DX3)
Prosecution History for Farrell U.S. Patent No. 7,520,658
November 30, 2016 “DECISION Denying Institution of <i>Inter Partes</i> Review” for U.S. Patent No. 7,520,658 (Case IPR2016-01105)
July 31, 2017 “DECISION Denying Institution of <i>Inter Partes</i> Review” for U.S. Patent No. 7,520,658 (Case IPR2017-00765)
Neilson’s U.S. Patent No. 5,439,289 (Williams DX34)
Stubler’s Reissue Patent No. 25,490
Barnard’s U.S. Patent No. 4,822,175
Farrell U.S. Patent No. 7,520,662 (“’662 patent”; Williams DX2)
Prosecution History for Farrell U.S. Patent No. 7,520,662
December 19, 2017 “Final Written Decision” for Case IPR2016-001107 (U.S. Patent No. 7,520,662)

August 28, 2015 “Declaration of James J. Farrell” (Exhibit 2022 in Case IPR2016-001107; U.S. Patent No. 7,520,662; “Farrell Decl.”)
March 13, 2017 “Declaration of Jens Voges Concerning Secondary Considerations” (Exhibit 2028 in Case IPR2016-001107; U.S. Patent No. 7,520,662; “’662 Voges Decl.”)
Kelly’s U.S. Patent No. 4,740,088 (Williams DX33)
Order Construing The Terms Of U.S. Patent Nos. 5,803,377; 7,144,150; 7,520,658 and 7,520,622
Second Revised Final Joint Claim Construction Charts, filed August 15, 2017
The transcript for the December 13, 2017 deposition of Brian P. Williams (“Williams”)
The transcript for the March 22, 2018 deposition of Brian O’Flynn (“O’Flynn”)
The transcript for the March 23, 2018 deposition of Ernest Pryor (“Pryor”)
The transcript for the July 10, 2018 deposition of Benjamin Branson (“Branson”)
The transcript for the June 28, 2018 deposition of Michael Sandford (“Sandford”)
Shake Shop Express promotional videos
f’real promotional videos
REDACTED HBB Business Case Summary: Blend in Cup – Cornelius (Williams DX1; HBBF13063-13071)
UNREDACTED HBB Business Case Summary: Blend in Cup – Cornelius (HBBF171457-171465)
HBB Business Case Summary: Blend in Cup – Stand Alone (Williams DX6; HBBF13037-13044)
HBB Business Case Summary: Mix in Cup – Stand Alone (Williams DX7; HBBF13051-13057)
HBB Business Case Summary: Hershey’s Ice Cream – Mix in Cup (Williams DX8; HBBF13112-13118)
HBB Business Case Summary: Mix-in-Cup Gen 2, Auto Sanitize & Display (Williams DX9; HBBF39439-39444)
HBB Business Case Summary: Dairy Queen Hands Free Blizzard Machine (Wood DX23; HBBF13240-13250)
Hamilton Beach “SmartServe” Operation Manual for MIC2000 and BIC2000

(Williams DX10; HBBF23-32)
Hamilton Beach Service Manual for MIC2000 and BIC2000 (HBBF37890-37975)
Hamilton Beach Product Definition Spec BIC2000/BIC2000CE (Branson DX23; HBBF 129)
Hamilton Beach Product Definition Spec MIC2000/MIC2000CE (Branson DX24; HBBF 124)
Hamilton Beach Product Definition Spec IMI2000/IMI2000CE (Branson DX25; HBBF 122)
Hamilton Beach CAD drawing for cup shield assembly (Williams DX13; HBBF 1802)
MIC2000 and BIC2000 blade pictures (Williams DX40; HBBF322,438-444)
MIC2000 and BIC2000 cup shield picture (Williams DX41; HBBF332)
Williams U.S. Patent Application Publication No. 2012/0087203
Branson conception drawing for IMI2000 (Branson DX2, HBBF9300)
Hamilton Beach Cup Holder Evaluation (Branson DX22; HBBF2125-2131)
Hamilton Beach NSF Documentation Package for MIC2000 and BIC2000 (Branson DX26; HBBF1-44)
Hamilton Beach GM44 CLOSED Issue List (HBBF147920-14818)
GM44 Request for Quotation (HBBF14772-14782)
GM44 Product Disclosure (HBBF14976-14980)
BIC3000-DQ Daily Cleaning Instructions
Evaluating Whether MIC2000 Aerates Frozen Products – Initial Test (attached Exhibit “B”)
Hamilton Beach Blend-in-Cup Advertisement (Williams DX37; HCC218-219)
Hershey’s Ice Cream and Hamilton Beach Bring Milkshakes to the Masses (Williams DX39; HBBF10817-10818)
Pictures of Shake Shop Express Kiosks (O’Flynn DX5; HBBF10844-10855)
Advertisement for BIC3000-DQ Hands-Free Blizzard Machine (Blackmon DX11; FREAL5876-5877)
November 12, 2009 License Term Sheet (Wood DX3)
May 26, 2010 Patent License Agreement (Williams DX36, HBBF651-665)

Development, Technology and Supply Agreement between IMI Cornelius and Hamilton Beach (Wood DX 21, HBBF101081-101122)
Defendant Hamilton Beach Brand's, Inc.'s Response To Plaintiffs' Second Set Of Interrogatories (Blackmon DX2)
Hamilton Beach BIC2000, MIC2000 and IMI-2000 blender sales through 2017 (Williams DX44, HBBF13235)
2/10/10 e-mail from Ben Branson to Doug Anderson (O'Flynn DX2; HBBF20103)
10/20/10 e-mail from Jason Reed to Brian O'Flynn (Wood DX1, HBBF96237)
10/27-28/10 Bilateral Confidentiality Agreement (Wood DX2, HCC336)
11/3/10 e-mail from Brian O'Flynn to Zachary Waite (Williams DX15; HBBF39719-39720)
11/9/10 e-mail from Zachary Waite to Brian O'Flynn (Williams DX16; HBBF37084-37085)
11/11/10 e-mail from Brian O'Flynn to Brian Williams (Williams DX17; HBBF23153-23154)
12/15/10 e-mail from Brian O'Flynn to Hank Wood (Williams DX18; HBBF19904)
12/20/10 e-mail from Brian O'Flynn to Zachary Waite (Williams DX19, HBBF39690-39691)
Proposed Agenda for January 4-5, 2011 Hamilton Beach/Hershey Meeting (Wood DX9; HCC351)
1/4-5/11 "F'Real Product Development Schedule" notes (Williams DX14, HCC1354)
2/25/11 e-mail from Hank Wood to Jim Farrell (Wood DX19, HBBF619-623)
6/16/11 e-mail from Tom Hooker to Alex Raring (Raring DX8, HCC26756)
7/1/11 e-mail from Alex Raring to Zachary Waite (Raring DX9;HCC26761-26763)
7/6/11 e-mail from Alex Raring to Zachary Waite (Raring DX10, HCC26767)
7/6/11 e-mail from Tom Hooker to Alex Raring (Raring DX11, HCC26770-26772)
8/2/11 letter from Hank Wood to Jim Farrell terminating patent license (Wood DX12, HBBF685)
5/10/12 e-mail from Ernie Pryor to Ann Marie Blackmon (Blackmon DX14;

HBBF19873)
10/11/13 e-mail from Ben Branson to Brian O’Flynn (Williams DX22; HBBF48744-48747)
2/21/14 e-mail from Dinsh Guzdar to Paul Gobel (Guzdar DX3: FREAL226571-226575)
Installation and Operation Guide for f̄real FRLB2 blender
In-Cup Blender With Chemical-free Automated Clean-in-Place System: Model FRLB4 (FREAL131216-131220)
U.S. Published Application No. 2018/0132663 (f̄real FLRB6 blender)
Plaintiff F’real’s Notice of Rule 30(b)(6) Deposition of Defendant Hershey Creamery Company
1/16/11 e-mail from Tom Holder to Zachary Waite (Holder DX2, HCC4748-4749)
1/16/11 e-mail from Tom Holder to Zachary Waite (Holder DX3, HCC4750-4751)
11/3/10 e-mail from Brian O’Flynn to Zachary Waite (Waite DX15, HCC2980)
“Freal Style Machine” folder (Waite DX7)
4/26/13 e-mail from Zachary Waite to Tom Holder (Waite DX19, HCC5044-5045)

III. Legal Standards

9. Because I am not a lawyer, counsel for f̄real has provided me with certain legal principles to use in analyzing the infringement issues and formulating my opinions.

10. I understand that a determination of infringement is a two-step process. First, the claims are construed by the Court as needed to ascertain their proper scope. Second, the asserted claims are compared with the accused products or processes to determine whether those products or processes fall within the scope of the asserted claims.

11. I understand that the Court has construed the claim terms in dispute in its “Order Construing The Terms Of U.S. Patent Nos. 5,803,377; 7,144,150; 7,520,658; and 7,520,622,”

dated November 29, 2017 (D.I. 83; “Markman Order”). I have been told that, for purposes of this report, I should accept and use the Court’s constructions of the disputed claim terms.²

Provided below is a summary of the claim constructions made by the Court in that order:

<u>Disputed Claim Term</u>	<u>Court’s Construction</u>
“rinse chamber” (‘150 patent)	“an enclosure in which a rinse apparatus is positioned to provide rinsing”
“sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel” (‘658 patent)	“the splash shield is heavy enough to create sufficient downward force on the vessel so as to retain the vessel within the holder when the mixing element moves upwardly in the vessel from the first position to the second position when liquid is present”
“providing a mixing machine” (‘658 and ‘662 patents)	“making a mixing machine available for use”
“while isolating the vessel from the rinsing fluid” (‘662 patent)	its plain and ordinary meaning
“frozen substance” (‘377 patent)	its plain and ordinary meaning
“grinding means for ...grinding the frozen substance to form a ground substance” (‘377 patent)	a means-plus-function term where the claimed function is “grinding the frozen substance to form a ground substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile”
“shaving elements” (‘377 patent)	a means-plus-function term where the claimed function is “shaving a frozen substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile”

² I have been told by counsel that Defendant Hamilton Beach has filed a motion for partial reconsideration of certain claim terms construed by the Court in its Markman Order, but the Court has not yet ruled on Hamilton Beach’s motion. To the extent the Court alters any of its original claim constructions, I reserve the right to supplement or amend my infringement analysis.

“aeration means for ...causing air to be incorporated into a mixture” (‘377 patent)	a means-plus-function term where the claimed function is “causing air to be incorporated into a mixture” and the corresponding structure is “curved, wave-like structure(s) on a rotatable blade with a slim cross-sectional profile”
“means for directing liquid from above the upper surface of the blade assembly to below the blade assembly” (‘377 patent)	a means-plus-function term where the claimed function is “directing liquid from above the upper surface of the blade assembly to below the blade assembly” and the corresponding structure is “a rotating blade having three pairs of cutouts at the perimeter of the blade spaced 120° from each other, the cutouts including a trailing edge that is elevated above the rotational plane of the blade to form an inverted ramped surface for the liquid”
“blade assembly including shaving elements and aeration elements” (‘377 patent)	its plain and ordinary meaning
“control means for causing the blade assembly to move between upper and lower blade positions at least twice” (‘377 patent)	a means-plus-function term where the claimed function is “causing the blade assembly to move between the upper and lower blade positions at least twice” and the corresponding structure is “a microprocessor programmed to instruct the carriage motor to move the blade assembly between the upper and lower blade positions at least twice”
“control means responsive to the output of the cup sensor for generating blade rotation speed and vertical blade positioning control signals which correspond to the size of the cup detected by the cup sensor” (‘377 patent)	a means-plus-function term where the claimed function is “generating blade rotation speed and vertical blade positioning control signals which correspond to the size of the cup detected by the cup sensor” and the corresponding structure is “a microprocessor programmed to generate control signals for the carriage motor to vertically position the blade assembly and for the blade motor to rotate the blade at pre-determined speeds corresponding to the size of the cup detected by the cup sensor”

<p>“control means for generating up and down blade movement control signals and blade rotation control signals” (‘377 patent)</p>	<p>a means-plus-function term where the claimed function is “generating up and down blade movement control signals and blade rotation control signals” and the corresponding structure is “a microprocessor programmed to generate control signals for the carriage motor to move the blade assembly up and down and for the blade motor to rotate the blade”</p>
<p>“control means is further for generating blade speed control signals to reduce the rotational speed of the blade assembly when the blade assembly is moved to a first level and to increase the rotational speed of the blade assembly when the blade assembly is moved to a second level” (‘377 patent)</p>	<p>a means-plus-function term where the claimed function is “generating blade control signals to reduce the rotational speed of the blade assembly when the blade assembly is moved to a first level just below the milkshake surface and to increase the rotational speed of the blade assembly when the blade assembly is moved to a second level just above the milkshake surface” and the corresponding structure is “a microprocessor programmed to generate a control signal to the blade motor as mixing is being completed to reduce the rotational speed of the blade when it is just below the milkshake surface (first level) and the, for ‘spin off,’ to increase the rotational speed of the blade when it is just above the milkshake surface (second level).”</p>
<p>“control means responsive to activation of the initiation switch and the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch” (‘377 patent)</p>	<p>a means-plus-function term where the claimed function is “generating the blade movement control signals and the blade rotation control signals in response to activation of the initiation switch and the output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch” and the corresponding structure is “a microprocessor programmed to generate, after receiving appropriate inputs from the initiation switch that the user wants to begin blending and from the cup sensor that a cup is detected in the cup support, control signals to the carriage motor to lower the blade assembly into the cup and to the blade motor to rotate the blade assembly”</p>

12. I further understand that the parties agreed to the construction of additional claim terms as set forth in the parties' "Second Revised Final Joint Claim Construction Charts," filed with the Court on August 15, 2017 (D.I. 62). I have been told that, for purposes of this report, I should also accept and use the claim constructions the parties have agreed to. Provided below is a summary of the claim constructions the parties have agreed to as set forth in the parties' "Second Revised Final Joint Claim Construction Charts":

<u>Claim Term</u>	<u>Agreed Upon Construction</u>
"vessel" ('150, '658 and '662 patents)	"cup or container"
"splash shield"/"shield" ('150, '658 and '662 patents)	"lid for the cup opening"
"splash shield positionable covering the opening of the vessel" ('150 patent)	"lid positionable to cover most of the cup opening"
"splash shield ... covering the opening of the vessel" ('658 patent)	"a lid covering most of the cup opening"
"splash shield shielding the vessel opening" ('662 patent)	"a lid covering most of the cup opening"
"positioning the shield in contact with the vessel to cover the opening of the vessel" ('658 patent)	"positioning the splash shield lid in contact with the cup opening in order to cover most of the cup opening"
"at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber" ('150 patent)	"one or more nozzles coupled to a rinse fluid source and pointed at the splash shield to directly spray fluid onto a surface of the splash shield within the rinse chamber"
"characteristic of a cup" ('377 patent)	"a physical attribute of a cup"
"unrestrained against sliding movement on the shaft in a direction away from the opening"/"unrestrained against upward movement away from the opening" ('658 patent)	"without any other mechanical means of restraining the upward sliding movement of the splash shield on the shaft apart from the mass or weight of the splash shield itself"

13. I have been told that when claim elements are phrased as a "means" to perform a particular function, I should look to the specification of the patent and interpret that language in light of the corresponding structure, material or acts described in the specification, and

equivalents thereof. To the extent that the Court has already done this interpretation of a “means-plus-function” claim element in its Markman Order, I have been told to use the Court’s claim construction. In subsequently determining whether a “means-plus-function” claim element is present in an accused device, I have been told to determine whether the means in the accused device which performs the function stated in the claims is the same as or equivalent to the corresponding structure described in the patent as performing that function.

14. For those claim terms that are not in a “means-plus-function” form and have not been construed by the Court, I have been told to interpret those claim terms in accordance with their plain and ordinary meaning to one of ordinary skill in the art at the time of the invention, in a manner that is consistent with the patent specification.

15. To assess the level of ordinary skill in the art, I have been told that one considers the type of problems encountered in the art, the prior solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology and the level of education of active workers in the field. In this case, I have reviewed each of the patents-in-suit, considered the type of problems encountered in the art, the prior solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology and the level of education of active workers in the field. In addition, I considered my own experience teaching and performing research in the mechanical engineering field, as well as my experience collaborating and consulting with companies on mechanical engineering projects. Further, I have considered the findings of the U.S. Patent and Trademark Office about the applicable level of ordinary skill in the art as set forth in the “Final Written Decision” for the *inter partes* review proceeding involving f’real’s ‘662 patent.³ Based upon my assessment, I agree with the U.S.

³ IPR2016-01107 (“‘662 patent IPR”), Paper 40 at p. 18.

Patent and Trademark Office that a person of ordinary skill in the art for the patented technology at issue in this action would be an engineer with at least an undergraduate degree in mechanical engineering or related discipline and at least three years of professional or research experience in the design of consumer or medical products that utilize fluid systems.⁴

16. I understand that patent infringement occurs when someone makes, uses, sells, offers to sell, imports any patented apparatus, system or method without authorization to do so from the patent owner. To infringe a claim literally, the apparatus, system or method must include each element of that claim literally. If one or more claim elements are missing from the accused apparatus, system or method, then the claim is not literally infringed by such apparatus, system or method. Nonetheless, an accused apparatus, system or method that does not literally infringe a claim may still infringe the claim under the Doctrine of Equivalents (“DOE”) if the differences between the accused apparatus, system or method would be considered insubstantial to one of ordinary skill in the art. I have been told that any analysis under the DOE must be performed on an element-by-element basis. One test of whether any differences are insubstantial is whether an element of an accused apparatus, system or method performs substantially the same function in substantially the same way and with substantially the same result as the claimed element would. Another consideration is whether one of ordinary skill in the art would know that a claimed element and a corresponding element of an accused apparatus, system or method was interchangeable at the time of infringement. I have been told that application of the DOE is subject to certain limitations, including the limitation that amending a claim during prosecution of a patent to add the claim limitation at issue can prevent the patent owner from using DOE for

⁴ The Patent Trial and Appeal Board at the U.S. Patent and Trademark Office accepted the definition of a person of ordinary skill in the art provided by Hamilton Beach’s technical expert, Dr. Slocum. See, ‘662 patent IPR, Paper 40 at p. 18.

that claim element to establish infringement. This is known as the doctrine of prosecution history estoppel.

17. I understand that infringement can be direct or indirect. Direct infringement is when a person or entity is directly responsible for the acts that constitute infringement, for example, by performing those acts themselves, or alternatively by directing or controlling the actions of another. Indirect infringement occurs when the accused infringer is responsible for causing or encouraging another person or entity to infringe, or to contribute to the infringement of another, and the other infringes the patent directly. I understand that both direct and indirect infringement can occur both literally and by equivalents.

18. I understand there are two types of indirect infringement: induced infringement and contributory infringement. Both induced infringement and contributory infringement require proof of direct infringement of a patent claim. Induced infringement occurs when: (1) the defendant acted with the intent to encourage, aid, instruct or otherwise cause another to commit an act or acts that would constitute direct infringement; (2) the defendant at the time had knowledge of or was willfully blind to the existence of the asserted patent and the defendant's actions would lead the other party to directly infringe; and (3) the other party infringed at least one claim of the asserted patent. Contributory infringement occurs when a defendant provides a material part or a component to another for use in a product, machine, or process that directly infringes and that defendant: (1) had knowledge of the asserted patent, (2) sold or provided a component that is a material component of the claimed invention, (3) knew that the component was especially made for use in a manner that infringes, (4) the component does not have a substantial non-infringing use and (5) the component is used in a manner that infringes the patent.

19. Although I express no opinion about the amount of damages that may be awarded in this case, I understand that the existence of (or lack of) a commercially-acceptable and available non-infringing alternatives to the product accused of infringement can be relevant to the determination of damages should an accused product be found to infringe. Such alternatives must be: (i) non-infringing, (ii) available, and (iii) commercially acceptable or adequate. Multiple considerations are relevant to whether a proposed alternative was a commercially-acceptable (or adequate) substitute in the marketplace for the accused product at the date of first infringement, including: (i) the realities of the marketplace; (ii) whether the accused infringer selected the accused infringing product rather than the alleged available, acceptable alternative; (iii) whether the alleged acceptable non-infringing substitute possesses characteristics significantly different from the patented product; (iv) the maturity of the proposed alternative technology; (v) whether purchasers are motivated to purchase because of particular infringing features of a product that are not available in the alleged non-infringing substitute; and (vi) the cost and/or difficulty of implementing the alleged substitute.

20. I understand that the question of whether an accused infringer copied the patented technology may be relevant to several issues, including a determination of willful infringement, establishing infringement under the doctrine of equivalents, defending against an allegation of obviousness and measuring damages. I understand that copying can be shown by direct or indirect evidence and there are numerous circumstances that can support an inference of copying including, but not limited to: (1) when a defendant was aware of plaintiff's product and technology and developed a similar infringing product after obtaining general knowledge of plaintiff's technology; (2) when a defendant uses plaintiff's patents and products as a roadmap to develop its own products; (3) when market pressures prompted a defendant to develop a product

with characteristics of plaintiff's product; (4) when a defendant is aware of plaintiff's patent, uses plaintiff's patented product as a template for creating its own, and also copies unpatented element of plaintiff's products; (5) when a defendant has a history of copying plaintiff's designs; and (6) when a defendant hires plaintiff's former employee that had knowledge of plaintiff's patented technology.

IV. f'real's Patented Technology

21. The technology at issue in this action generally involves self-rinsing commercial blenders and related processes that can be used for reconstituting single serving frozen beverages, especially frozen milkshake beverages, in a sanitary manner.

22. At the time Jim Farrell founded f'real in the 1990's and began work on the inventions of the patents-in-suit, milkshakes and smoothies were traditionally prepared behind the counter at restaurants and fast food chains (Farrell Decl., ¶2). At a restaurant, the server would typically place the milkshake ingredients into a large metal cup, hold the cup under a spindle mixer to mix the ingredients, and then pour the mixed ingredients into a glass to serve the customer. *Id.* After the meal, the metal cup and glass would need to be scrubbed clean before they were reused. *Id.*



23. For fast food chains, the milkshakes and smoothies were often prepared from premixed ingredients in a large machine and, upon demand, dispensed by the server into a disposable cup, which was sold to the consumer (Farrell Decl., ¶2). Periodically, the pre-mixed container would need to be emptied by the server and cleaned. *Id.*



24. Both of these traditional approaches take place behind the counter, are labor intensive and require a substantial amount of clean-up after the milkshakes are prepared and dispensed ('662 Voges Decl., ¶ 5).

25. For most of the convenience store market, the traditional labor-intensive approach is too inefficient and time-consuming to be a viable option ('662 Voges Decl., ¶6). At a convenience store, there may be only one or two employees on duty at any given time to handle all the responsibilities of running the convenience store. *Id.* Typically, the convenience store employees spend most of their time restocking the store shelves and refrigerators as well as manning the cash register to accept payment for food, beverages, gasoline and other items purchased by the consumer. *Id.* A busy convenience store attendant typically does not have time to clean up every time a consumer wants a milkshake. *Id.*

26. If the equipment is not cleaned on a regular, timely basis, disease-causing bacteria will grow on the milkshake equipment ('662 Voges Decl., ¶8). If a consumer becomes sick from

such disease-causing bacteria, it could be disastrous for both the consumer and retailer. *Id.* Also, if cleanup is not done between milkshakes, the flavor from one milkshake can carry over to the next. *Id.* Inadvertently mixing flavors in this way is, to put it mildly, very unappealing for consumers. *Id.*

27. During the mid-1990's, Mr. Farrell came up with the idea of preparing milkshakes from high quality ingredients outside the restaurant setting, placing those milkshakes in single serving cups and then hard-freezing those single serving cups for shipment to convenience stores and fast food restaurants (Farrell Decl., ¶3). The second part of Mr. Farrell's idea was designing a special blender for the frozen milkshakes that the consumer could use on their own at a convenience store or fast food restaurant (i.e., self-serve). *Id.*

28. Mr. Farrell first took on the problem of building a blender that could convert a frozen milkshake into the type of old-fashioned milkshake texture that consumers desire (Farrell Decl., ¶4; '662 Voges Decl., ¶10). He discovered that adding liquid to the frozen milkshake and aerating during the blending process made it easier to produce the old-fashioned texture. *Id.* For his first generation blender inventions, Mr. Farrell received U.S. Patent No. 5,803,377 (Farrell Decl., ¶4; '662 Voges Decl., ¶11).

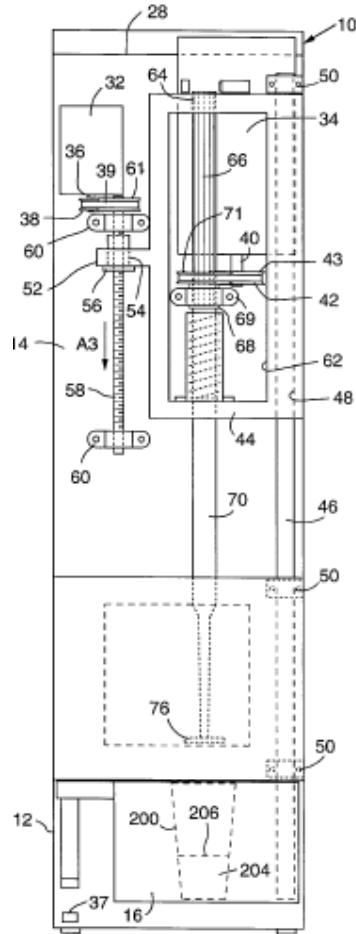


29. The next technical challenge Mr. Farrell faced was creating a method to automatically clean his blender (Farrell Decl., ¶5). To address the need for cleanliness, Mr.

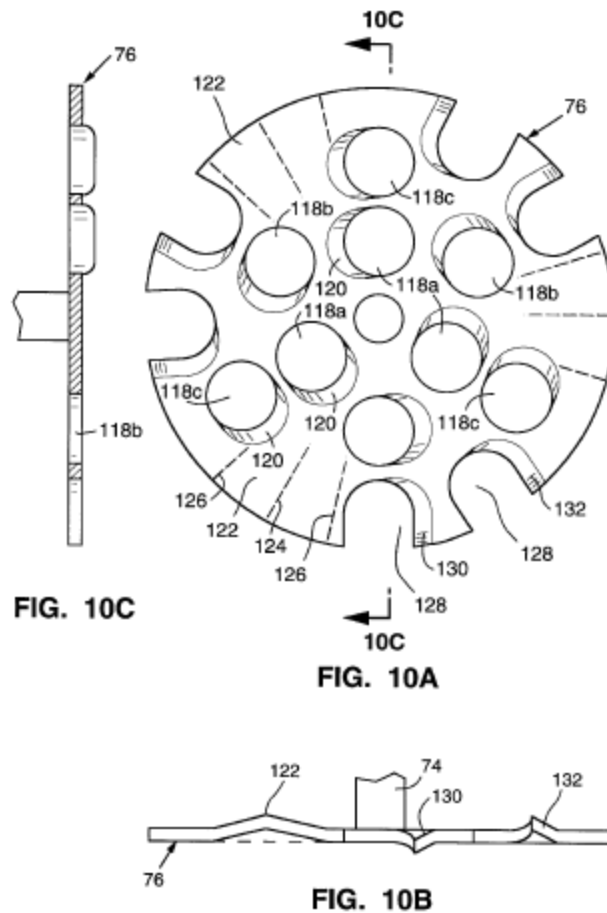
Farrell developed a system with would both automatically minimize the amount of food particles released into the food preparation chamber during milkshake preparation and then automatically clean the chamber after the milkshake was prepared and removed from the chamber. *Id.* Mr. Farrell minimized the release of food particles by having the blender automatically place a splash shield over the top of the milkshake cup during blending. *Id.* When blending was complete, the blender automatically cleaned the blending chamber, including the splash shield, with rinse nozzles after the fully prepared milkshake was removed by the consumer. *Id.*

A. f'real's Reconstituted Milkshake Patent: U.S. Patent No. 5,803,377

30. The apparatus disclosed and claimed in the '377 patent is designed to reconstitute a milkshake or other drink pre-frozen in a cup into a "customer preferred old fashioned texture milkshake or other frozen drink that will fit into the operational constraints of today's high volume fast-food restaurants" ('377 patent, 1:44-47). As described in the '377 patent, a preferred form of blending apparatus has a rotatable blade 76 at the lower end of shaft 66 which is in turn connected to blade motor 34. A carriage 44 holding the blade shaft 66 and connected to a carriage motor 32 allows the rotatable blade 76 to be lowered into cup 200 to blend/reconstitute the frozen into a cup drink 204 and then raised out of the cup once the blending/reconstituting process is complete. Figure 2 of the '377 patent is shown below:



31. The rotatable blade(s) 76 of the ‘377 patent is carefully designed to be able to both bore through and aerate the frozen substance during the blending/reconstituting process (see ‘377 patent, 7:7 – 8:30). Although other configurations are contemplated by the claims, a preferred form of rotatable blade 76 is shown in FIGS. 10A-C of the ‘377 patent:



32. An “important feature” of the ‘377 patent’s rotatable blade(s) is that it has a “slim cross-sectional profile” to “avoid excessive rotation of the entire contents of the cup” (‘377 patent, 9:11-15). To bore through the frozen substance, the preferred rotatable blade 76 shown in FIGS. 10A-C has depressed regions 120 formed immediately adjacent to holes 118a-c (‘377 patent, 7:19-21). The “depressed regions 120 grate through the frozen substance much like the grating action of a cheese grater” to allow frozen substance shavings to pass through holes 118a-c (‘377 patent, 7:22-27). For the preferred rotatable blade 76, a trailing edge 130 along the perimeter of the blade is also “depressed to act as a grating surface to bore through the frozen substance at the outermost radius of the blade” (‘377 patent, 7:48-54). This configuration “provides for easy manufacture in a stamping operation, and maintains the mechanical strength

of the blade so that its outside edges are not deflected upward by the force of the frozen substance being bored through” (‘377 patent, 7:29-33).

33. To aerate the frozen substance while it is being reconstituted, “three waves are formed in the [preferred] blade” illustrated in FIGS. 10A-C (‘377 patent, 7:36). “[E]ach of the waves 122 includes a center crease 124 which is elevated above the plane of the blade and side creases 126 which lie in the plane of the blade” (‘377 patent, 7:36-38). “During high speed rotation of the blade, the waves 122 increase the whipping effect of the blade by causing an alternately high and low pressure zone at the blade’s edge, creating turbulent eddies which cause a whipping effect” (‘377 patent, 7:42-47).

34. To help prevent the blade 76 from carrying ingredients up and out of the cup as the blade is lifted from the cup, an elevated trailing edge 132 is included on the preferred blade 76 (‘377 patent, 7:58-64). “The trailing edge 132 is elevated to act as a inverted ramped surface to force milkshake downward in the cup and thereby minimize the amount of milkshake that is driven up the interior walls of the cup by centrifugal force” (‘377 patent, 7:55-58).

35. To facilitate reconstituting, milk or other liquid (e.g., water) may be added. In a preferred embodiment, “[a]t the time boring begins, the milk pump is activated and begins pumping milk into the cup through tube 24 for mixing and whipping with the small frozen particulate being created by the boring action of the blade” (‘377 patent, 8:24-27).

36. To optimize the ability of the ‘377 blending apparatus to reconstitute a frozen into a cup drink, the ‘377 patent discloses electronic control features including a microprocessor and various sensors. For example, limit switches 33, 33b are disclosed as cup sensors to sense both the presence of a cup in the apparatus housing and its size (‘377 patent, 6:44-67). Through use of these cup sensors, the microprocessor can determine the appropriate quantity of fluid to be

delivered to the cup during the blending process and appropriately set other blending parameters ('377 patent, 6:58-67). An optical detector 88 is also disclosed to ascertain when the blade reaches the bottom of the cup during the blending process and thereby insure that the blade does not grind into the cup itself ('377 patent, 5:43-61).

37. The application for the '377 patent was filed on February 5, 1997. In the only office action, the pending claims were rejected as being anticipated by Tomlinson's '997 patent. The Tomlinson '997 patent discloses an automated milkshake machine having a pyramid shaped blade assembly formed by three sets of cutter blades. In its February 2, 1998 office action response, the examiner successfully distinguished the Tomlinson '997 patent "because Tomlinson fails to disclose or fairly suggests means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser." The application for the '377 patent was allowed on March 16, 1998 and the '377 patent issued on September 8, 1998.

38. The '377 patent has 27 claims, of which claims 1, 11 and 27 are the independent claims. Each of independent claims 1, 11 and 27 recite in various forms a housing, a cup support mounted to the housing, grinding means/shaving elements and aeration means/aeration elements. *Id.* Independent claims 1 and 27 also recite a "liquid dispenser" to direct liquid into the cup (claims 1, 27). A number of the dependent claims reference a cup sensor and its various attributes including detecting cup presence, detecting cup size and using the cup sensor in cooperation with a microprocessor to control the amount of liquid dispensed or the limits of blade movement (see claims 5-6, 9-10, 19, 22-26). Other dependent claims are directed to features of the grinding element(s), aeration element(s) or liquid dispenser (see claims 2-3, 8, 13-

14, 16-17). Some dependent claims recite the motorized movement of the carriage holding the blade assembly (see, claims 15, 20-22).

39. Representative and asserted independent claim 1 of the ‘377 patent reads as follows:

1. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:
a housing;
a cup support mounted to the housing;
a liquid dispenser having an outlet positioned to direct liquid into a cup positioned in the cup support;
grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance; and
aeration means for, when a cup containing a frozen substance is positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser.

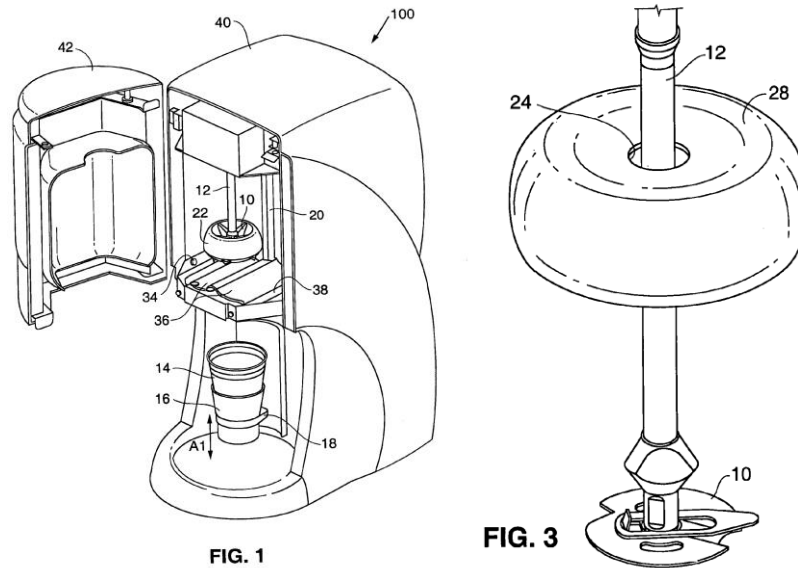
B. f’real’s Self-Rinsing Blenders Patents: U.S. Patent Nos. 7,144,150; 7,520,658 and 7,520,662

40. The f’real self-rinsing blender patents, the ‘150, ‘658 and ‘662 patents, disclose a blender that minimizes the amount of food particles released into a food preparation chamber during milkshake⁵ preparation and then automatically cleans the chamber (‘150 patent, 2:6-22, 57-64; ‘658 patent, 1:18-24, 63-67; ‘662 patent, 1:63-67). The release of food particles is minimized by placing a weighted splash shield on top of the milkshake cup prior to blending so that the top opening of the cup is mostly covered during the blending process (‘658 patent, 1:48-49). When the blending process is complete and the blended milkshake cup is removed, the

⁵ For purposes of this report, the term “milkshake” is used to generically refer to a frozen blended beverage, which could, for example, be a milkshake, smoothie, or other frozen blended beverage.

blender automatically rinses the blending chamber and weighted splash shield by spraying cleaning fluid through pre-positioned interior nozzles. *Id.*

41. FIGS. 1 and 3 of the f'real's self-rinsing blender patents illustrate a preferred embodiment:



42. The mixing machine 100 has a cup holder 16 into which the user can place their pre-filled cup 14. The preferred cup holder shown in FIG. 1 is shaped like a larger version of the cup so that, when the cup is inserted, the cup holder supports the cup 14 on its bottom and lower sides. The cup holder is connected to a motorized vertical rail 20 that can lift the cup into the blending chamber defined, in the preferred embodiment, by enclosure 40, access door 42 and hinged doors 36 ('150 patent, 2:64 – 3:13, 3:44-47)⁶. As the top of the cup enters the blending chamber, it contacts the underside of a splash shield 22 in such a way that the splash shield covers the top opening of the cup like a lid ('150 patent, 3:17-32; '662 patent, 3:23-27, 4:37-38).

⁶ Alternatively, the mixing blade may be lowered while the cup and cupholder remain in place ('150 patent, 3:13-16)

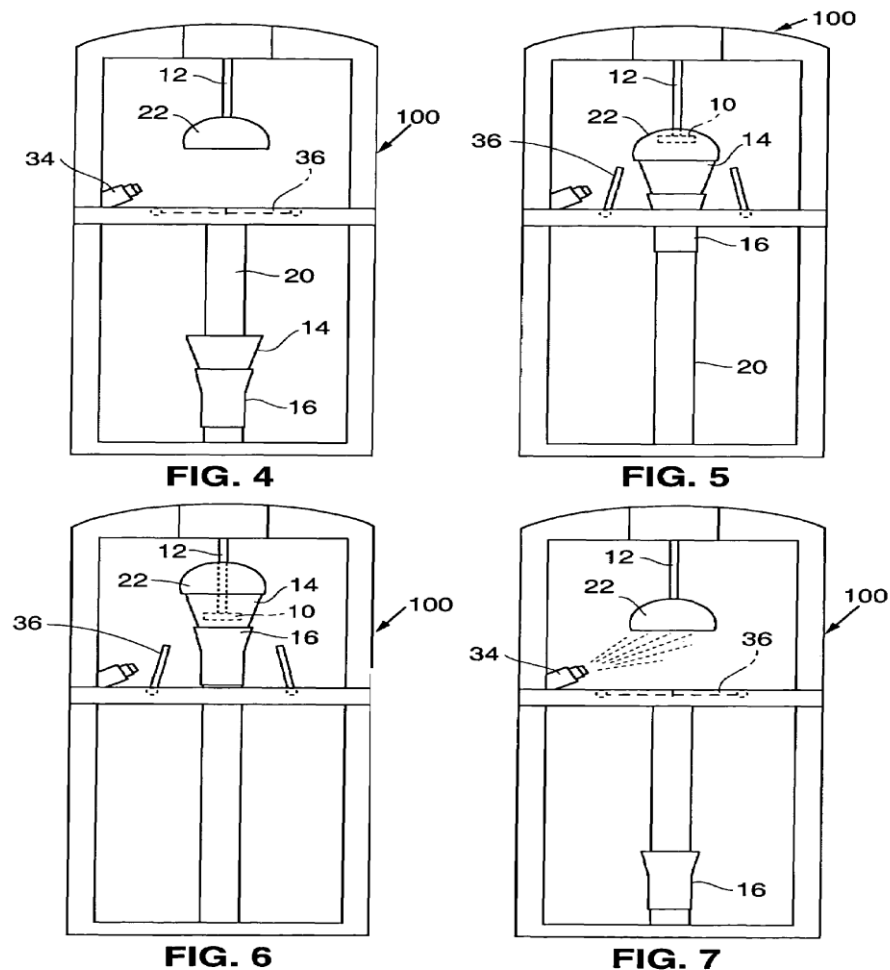
The only portion of the cup that is preferably uncovered corresponds to the splash shield opening 24, 26 through which the mixing blade shaft 12 passes. *Id.* While the splash shield 22 remains connected to the mixing blade 10 in the downward direction by the tapered portion of the mixing blade, the splash shield is designed to be largely free floating or unrestrained in its upward movement ('150 patent, 3:17-32). This unrestrained movement allows the splash shield to automatically move up and down with the milkshake cup during the active blending process while keeping the milkshake cup effectively covered the whole time ('658 patent, 2:57-64, 3:5-8,58-64).

43. A problem faced by Mr. Farrell in his efforts to minimize the amount of food particles released into the food preparation chamber during milkshake preparation was the upward force on the milkshake created by the rotating mixing blade ('150 patent, 4:4-29; '658 patent, 4:6-14; '662 patent, 4:55-58). If upwardly splashing milkshake knocked off the splash shield, the result would be a blending chamber filled with milkshake residue. As noted in the specification of f'real's self-rinsing blender patents, prior efforts to address this problem, including Neilson's U.S. Patent No. 5,439,289 ("Neilson patent"), required springs, clamping and/or other mechanisms ('150 patent, 4:5-9; '658 patent, 3:65-4:20). These approaches are explicitly distinguished by f'real's self-rinsing blender patents. *Id.* Mr. Farrell's solution was to make the splash shield of sufficient mass when used in conjunction with the cup holder to overcome the upward lifting force of the milkshake ('150 patent, 4:4-29; '658 patent, 4:3-20). In one preferred embodiment, the weighted splash shield is made of stainless steel and weighs approximately 5 lbs. ('658 patent, 4:26-28).

44. To automatically clean the splash shield after mixing, Mr. Farrell relied upon carefully positioned rinse nozzles ('150 patent, 3:32-38). As illustrated in FIGS. 1 and 4-7, "one

or more nozzles 34 (only one is shown) are provided for directing fluid onto the interior of shield 22. Nozzles 34 are coupled to one or more sources of rinse fluid, such as water (preferably hot or warm water) and/or sanitizing solution such as a quaternary ammonium sanitizer solution” (‘150 patent, FIGS. 1 and 4-7, 3:33-38). In the preferred embodiment, a fluid trough 38 and drain line are used to collect and dispose of the used rinse water (‘150 patent, 3:39-47).

45. FIGS. 4-7 illustrate a preferred process of mixing and automatic cleaning disclosed in the specification of f’real’s self-rinsing blender patents:



46. As shown in FIG. 4, the user first positions the food containing cup in the cupholder and pushes the start button (‘150 patent, 3:52-59; ‘662 patent, 32-35). Next, as shown

in FIG. 5, the cup and cupholder are raised until “the upper edge of cup 14 [comes] into contact with the shield 22” (‘150 patent, 3:56-59; ‘662 patent, 4:35-38). As shown in FIG. 5, the lower surface of the splash shield effectively covers the cup opening to prevent splashing of food particles into the food preparation chamber during the mixing process. The cup and cupholder then move up and down as shown in FIG. 6 during the mixing process (‘150 patent, 3:59-62; ‘662 patent, 4:38-42). Because the splash shield is weighted and largely free-floating in the preferred embodiment, it remains on top of the cup opening during the mixing process.

47. When the mixing process is concluded, the cupholder and cup are lowered until “the cup 14 separates from the shield 22 and is moved by the holder 16 to the position shown in FIG. 4. The cup may then be removed from the drink machine 100” (‘150 patent, 4:34-37; ‘662 patent, 5:9-16). Next, the hinged doors 36 are automatically closed in the preferred embodiment and “rinse fluid is directed onto the shield 22 using nozzles 34 as shown in FIG. 7” (‘150 patent, 4:38-40; ‘662 patent, 5:18-22). “If desired, the [mixing] shaft 12 may be rotated during and after rinsing” to better distribute the rinse water within the food preparation chamber (‘150 patent, 4:40-44; ‘662 patent, 5:23-34). In the preferred embodiment, “[t]he shield, blade and closed doors 36 shed the rinse fluid into trough 38, which then directs the water out of the machine via the drain line” (‘150 patent, 4:47-50; ‘662 patent, 5:34-36).

48. All of f’real’s self-rinsing blender patents claim priority to U.S. Provisional Patent Application No. 60/426,622, filed November 15, 2002. This provisional patent application discloses key features of f’real’s self-rinsing blender patent inventions including the basic blender design of the ‘377 patent, rinsing of the lid between uses by directing a water spray at the shield, a weighted splash shield, placement of the splash shield on the mixing blade, movement

of the splash shield with the cup during blending and unrestrained movement of the splash shield on the mixing blade.

49. On November 17, 2003, f'real filed U.S. Patent Application No. 10/715,171 which eventually matured into the '150 patent. During prosecution of the '150 patent, the examiner initially rejected the pending claims as being obvious in view of the Nielson patent, Levine's U.S. Patent No. 4,637,221 and Harr's U.S. Patent No. 1,090,148. In response to that office action, f'real amended the asserted claims to recite a "rinse chamber" and noted that the references cited by the examiner did not have such a feature. On August 30, 2006, the application that matured into the '150 patent was allowed and the '150 patent was subsequently issued on December 5, 2006.

50. Representative asserted independent claim 15 of the '150 patent reads as follows:

15. On a mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing contents of the vessel, the improvement comprising:

a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;

a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and

at least one nozzle coupled to a source of rinse fluid and oriented to direct rinse fluid onto the splash shield within the rinse chamber.

51. On April 28, 2005, f'real filed U.S. Patent Application No. 11/116,497 as a continuation-in-part of the patent application for the '150 patent. This continuation-in-part patent application eventually matured into the '662 patent. During prosecution of the '662 patent, the examiner's only rejection was based upon the potential for double patenting in view of f'real's '150 patent. For the asserted claims, f'real overcame this rejection by filing a terminal

disclaimer. On January 12, 2009, the application that matured into the '662 patent was allowed and the '662 patent was subsequently issued on April 21, 2009.

52. Asserted independent claim 21 of the '662 patent reads as follows:

21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing material to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield;

after mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.

53. On November 22, 2005, f'real filed U.S. Patent Application No. 11/284,646 as a divisional of the patent application for the '150 patent. This divisional patent application eventually matured into the '658 patent. During prosecution of the '658 patent, the examiner initially rejected the pending claims based upon various combinations of Stubler's RE 25,490, Barnard's U.S. Patent No. 4,822,175 and Harr's U.S. Patent No. 1,090,148. To overcome these references, f'real noted that its splash shield does not require either Harr's spring or the user's hand in Barnard to keep the splash shield on top of the cup during mixing. Use of a movable, weighted splash shield in f'real's invention accomplishes these objectives. On March 6, 2009, the application that matured into the '658 patent was allowed and the '658 patent was subsequently issued on December 5, 2006.

54. Representative asserted independent claim 1 of the '658 patent reads as follows:

1. A mixing machine for mixing a liquid contained in a vessel having an opening, the mixing machine comprising:

a holder coupled to the mixing machine, the holder proportioned to receive a vessel;

a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;

a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;

a shaft; and

a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.

V. The Accused Products and Methods

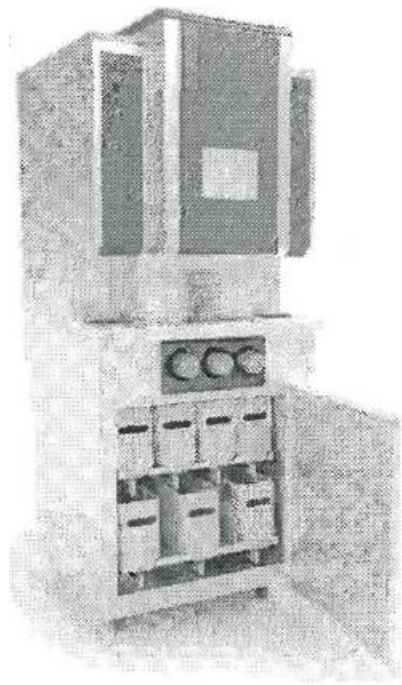
A. Hamilton Beach IMI2000 Blender

55. In 2009, IMI Cornelius wanted to build a drink machine for fast food restaurants to automatically prepare smoothies in disposable cup (Williams DX1, HBBF13065; Pryor, pp. 6-10; Williams, pp. 182-184). IMI Cornelius was a world leader in the manufacture of chilled beverage equipment. *Id.* While IMI Cornelius had expertise in building machines to dispense ice and drinks, they wanted Hamilton-Beach to develop a blender module that would fit within their larger piece of drink dispensing machine. *Id.* The larger IMI Cornelius machine would dispense ice and liquid ingredients into a cup, move the cup over to the Hamilton Beach module and the Hamilton Beach module would then blend the drink in the cup. *Id.* After blending, IMI Cornelius expected the Hamilton Beach blender module to automatically sanitize itself before the next drink was blended. *Id.* IMI Cornelius made it clear that the cleansing process needed to be

automatic – manual spray cleaning was not an acceptable option. *Id.* Manual rinsing was perceived as “going backward” (Williams, pp. 182-184).

56. To get ideas for building the IMI2000 blender module, Hamilton Beach’s engineers, Brian Williams and Ben Branson, visited their local Wawa convenience store in Glen Allen, Virginia to inspect one of f’real’s self-rinsing blenders (Williams, p. 17-21; Branson, pp. 9-11). As part of that inspection, they watched preparation of a f’real milkshake. *Id.*

57. During 2009 and 2010, Hamilton Beach began developing a prototype blender that could be inserted into the larger IMI Cornelius drink machine. Hamilton Beach designated this blender as the “IMI2000” (Williams, pp. 100, 112-114; Williams DX1, HBBF13069):



58. The internal configuration of this IMI2000 blender module is illustrated, among other places, in the “Product Definition Spec IMI2000/IMI2000CE” (Branson DX2 and DX25; Branson, pp. 98, 110; Raring DX9, HCC26762; Raring, pp. 165-166; Williams, pp. 127-130; Williams DX10, HBBF25). The IMI2000 has a cylindrically-shaped cup shield which moves up

and down during the blending process. *Id.* The cup shield starts in a raised position to allow the customer's cup to be inserted into the IMI2000 cupholder. *Id.* The cup shield and mix motor are then lowered by a carriage stepper motor and lead screw until the surface of the cup shield lid contacts the top of the cup and at least partially forms a seal around the cup. *Id.* The carriage motor then lowers the mix motor further and the mix motor is then activated to begin the blending process. *Id.* The carriage motor and mix motor drive the blade into the cup and can make several passes within the cup to complete a blending process. The weight of the splash shield lid assembly in conjunction with the cup holder prevents the cup from rotating. *Id.* Due to its free-floating design, the cup shield continues to rest on top of the cup as the carriage motor, mix motor and blade move up and down during the blending process. *Id.* Once the contents of the cup are fully blended, the mix motor and cup shield are raised so the cup can be removed and served to the consumer. *Id.* After the cup has been removed, the mix motor and cup shield are again lowered by the carriage motor so that the food zone (i.e., cup shield lid, mix motor shaft, blade/agitator) is automatically rinsed by several jets of water coming from pre-positioned nozzles within the wash chamber. *Id.* After this wash cycle, the mix motor and cup shield are raised so another cycle can begin. *Id.*

59. The rinse nozzles in the IMI2000 are located below the cup holder and pointed upward toward the splash shield lid (Branson, pp. 61-62). The idea is for the IMI2000 spray nozzles to act like a bidet (Branson, pp. 9-10).

60. During their joint development efforts, Hamilton Beach and Cornelius learned that f'real had patent rights, specifically f'real's '662, '658 and '150 self-rinsing blender patents, for the self-rinsing blender technology they were planning to use for the IMI2000 (see Williams DX1, HBBF13067; HBBF0171457-165; Wood DX21). Hamilton Beach approached f'real

about obtaining a license under f̄real’s self-rinsing blender patents. *Id.* In response, f̄real indicated that it was only willing to grant a limited license that would not allow Hamilton Beach blenders to compete with f̄real in the self-serve convenience store market (Wood DX3; Williams DX36). Based upon f̄real’s restrictions, f̄real and Hamilton Beach signed a “License Term Sheet” on November 11, 2009 and then a formal “Patent License Agreement” on May 26, 2010. *Id.* The license documents demonstrate that Hamilton Beach was fully aware of f̄real’s self-rinsing blender patents no later than November 11, 2009 and aware by the same date that the self-rinsing blender features they were building into their accused blenders were covered by f̄real’s self-rinsing blender patents. *Id.* Significantly, the “HBB Business Case Summary” prepared for the IMI2000 notes: “The method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f̄REAL (who have IP in this area that we intend using) and HBB... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)” (UNREDACTED “HBB Business Case Summary”, HBBF171458).

61. Through the end of 2017, Hamilton Beach reports sales of 597 IMI2000 modules to IMI Cornelius and generated \$744,927 of revenue from those sales (Williams DX44). Hamilton Beach made numerous demonstrations of the IMI2000 to prospective customers, including Ben Branson’s demonstrations to Taco Bell and a college in Pennsylvania (Branson, pp. 99-102). During those demonstrations, Mr. Branson performed all the steps of claim 21 of the ‘662 patent. *Id.*

B. Hamilton Beach's MIC2000 Blender and Hershey's "Shake Shop Express"

62. Early in their development of the IMI2000 blender module, Hamilton Beach considered leveraging the IMI2000 development efforts to build a similar blender they could sell as a "stand alone" blender (Williams DX1, HBBF13065; Williams DX 6). Hamilton Beach got their opportunity when they were approached by co-defendant Hershey Creamery Company ("Hershey") in October 2010 about jointly working on a blender for frozen milkshakes and smoothies (Wood DX1). To quickly move their discussions forward, Hershey and Hamilton Beach signed a "Bilateral Confidentiality Agreement" on October 27-28, 2010 (Wood DX2, HCC336).

63. From their correspondence, it quickly became clear that Hershey and Hamilton Beach were planning to use a "stand alone" version of the IMI2000 blender to compete with f'real in the self-serve convenience store market (Williams DX16-19). In a November 8, 2010 e-mail, Hershey told Hamilton Beach that they had "done a lot of work here on f'real," including finding detailed information about the formulation of f'real's frozen milkshakes (Williams DX16). The next day, Hamilton Beach responded, "[t]hanks for looking at the f'real product, testing it, and determining how much water is added. This is good" (Williams DX16). On November 11, 2010, Hershey forwarded a picture of the inside of the f'real blender to Hamilton Beach, adding "[y]ou probably already saw but here it is" (Williams DX17). On December 15, 2010, Hamilton Beach sent an e-mail to Hershey about a high level meeting on January 4-5, 2011 at Hamilton Beach's headquarters to launch their joint venture together into the self-serve convenience store market (Williams DX18). During that meeting, "[p]arts of the detailed discussion will probably be our thoughts on how to convert this [IMI2000] into a self serve machine, a demo the unit & attempting to mix f'REAL shakes, next steps and approximate timing" (Williams DX18). To remove any doubt about their goal of competing head-to-head with

f'real in convenience stores for self-serve frozen milkshakes, Hershey wrote to Hamilton Beach on December 16, 2010: "We had a great meeting yesterday with the road manager for the NJTP plazas. Unfortunately F'real is getting their test market location like we were afraid of. The manager is excited to see that we are working on it but will obviously not miss sales in the near term if F'real pans out as a success. This reiterates our excitement for the program and the urgency to get it moving" (Williams DX19). On January 4-5, 2011, the launch meeting at Hamilton Beach's headquarters proceeded as planned between high level Hershey and Hamilton Beach executives (Wood DX9). In Hershey's handwritten notes from the meeting, the joint venture was referred to as the "f'Real Product Development" (Williams DX14; Waite DX 8).

64. On February 1, 2011, Hamilton Beach's marketing representative, Mr. Brian O'Flynn, began the process to obtain formal management approval for Hamilton Beach's joint venture with Hershey (Williams DX8, HBBF13112-13118). In the "HBB Business Case Summary" Mr. O'Flynn prepared for senior Hamilton Beach management, Mr. O'Flynn first described the problems associated with traditional milkshake preparation, including "labor and cleanability constraints." *Id.* Despite the attractiveness of "very high margin" on milkshakes, Mr. O'Flynn noted that "typically a large amount of real estate is need for a freezer, the ice cream needs to be hand scooped (so it is very labor intensive), often a large amount of ice cream is lost due to it icing over in the freezer, and sanitation is problematic since it depends on the quality of the operator." *Id.* Mr. O'Flynn then acknowledged f'real's pioneering work in overcoming those problems: "f'REAL was the first company in the US to offer a solution to these problems with their automated equipment and prepackaged shakes." *Id.* Mr. O'Flynn then summarized Hamilton Beach's discussions with Hershey to go into direct, head-to-head

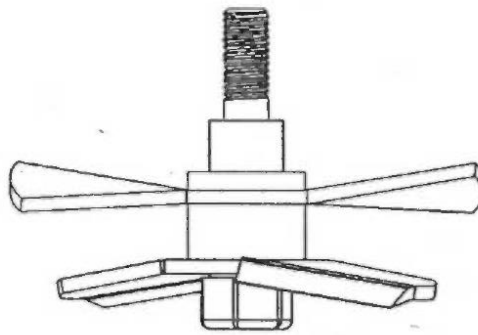
competition with f'real for f'real's customer base of colleges, universities, toll plazas, independent ice cream stores, and convenience stores. *Id.*

65. According to Mr. O'Flynn's HBB Business Case Summary, the stand alone blender Hamilton Beach was planning to build for Hershey would "use the Cornelius [IMI2000] blender module, use the cladding and controls from Stand Alone Blend in Cup (for Costa Coffee) but add the following features so it fits the needs of Hershey's: (1) the machine will need a new agitator design so that it can mix frozen ice cream (with added water) to deliver a perfectly mixed shake every time; (2) the machine needs to automatically deliver 2-3 oz. of water to each cup before it is blended. This allows the frozen ice cream to have a longer shelf life and improved flavor (increased water content forms ice crystals within the ice cream otherwise during storage); (3) The machine needs to sense that the cup has been removed (once the shake is mixed) so it knows to clean itself before the next mix cycle; (4) the machine needs a method of preventing the cup from rotating during the mix cycle. This is not required when blending iced drinks; (5) the machine needs to have a different (simplified) user interface so it can be easily understood by a consumer" (Williams DX8; see also, Williams pp. 17, 112-114; Branson, pp. 14-16, 73-74).

66. The blender Hamilton Beach developed for Hershey, which Hamilton Beach designated as the MIC2000 blender, is pictured in Mr. O'Flynn's "HBB Business Case Summary" (Williams DX8, HBB13116; Williams DX10):



67. The internal configuration of the MIC2000 blender is illustrated in the “SmartServe Operation Manual” and the “Product Definition Spec MIC2000/MIC2000CE” (Williams DX10; Branson DX24; Branson, pp. 35-36, 97-98). According to Hamilton Beach engineer Ben Branson, the MIC2000 blade/agitator was designed to combine the attributes of a “post hole digger” and a “boat propeller” (Branson, pp. 34-36; Williams DX10, HBBF25; Williams DX40, HBBF441):



68. According to Mr. Branson, the lower MIC2000 blade, which is the “post hole digger,” has a depressed, “sharpened edge” designed to be able to “shave” through frozen Hershey milkshake mix-ins, such as chocolate chips (Branson, pp. 53-54; Pryor, pp. 68-72). The upper MIC2000 blade, which is the “boat propeller,” is “curved in multiple planes” so that it can create turbulence and get the frozen milkshake flowing within the cup (Branson, pp. 35-36; Pryor, pp. 68-70). The “boat propeller” design of the upper blade creates a high velocity flow turbulence resulting in air bubbles when the turbulence hits the top surface of the milkshake (Branson, pp. 44-47).

69. Because the MIC2000 de-aerates the Hershey milkshake during the blending process, one of the purposes of adding water to the mixture is to help restore some of the lost volume (Branson, pp. 38-39). Other objectives achieved by having the MIC2000 add water to the Hershey milkshake during blending include promoting product flow and reducing shipping costs (Branson, pp. 14-16; Williams, pp. 92-97; Pryor, p. 54; Williams DX8, HBBF13114).

70. The MIC2000 includes an infrared cup sensor to tell the MIC2000 microprocessor whether a cup is present in the mixing chamber (Williams DX10; Williams, pp. 92-97; Pryor, pp. 93-98). Through use of a cup sensor, the MIC2000 microprocessor can make sure the blended

Hershey cup is removed before the rinse cycle begins (Williams, pp. 92-97). Similarly, the cup sensor is used in conjunction with the consumer pressing the MIC2000 “START” button to alert the MIC2000 microprocessor that the blending process can safely begin (Pryor, pp. 93-98).

71. To retain the Hershey cup in the MIC2000 cupholder, Hamilton Beach places a heavy cast iron guide rod weight on top of its splash shield (Williams DX13; Pryor, pp. 50-54; Williams, pp. 120-124, 148-150). This heavy guide rod weight pushes down on the cup and thereby holds the cup more firmly in the cupholder. *Id.* “The weight of the lid assembly (as well as the detail of the cup holder) prevents the cup from rotating” (Raring DX9, HCC26762):



72. The weighted splash shield in the MIC2000 was designed by Hamilton to freely move up and down (Branson, p.110; Williams, pp. 127-130). “The design for that has always been for it to fall under its own weight” *Id.* There are no springs on top of the MIC2000 splash shield to bias the splash shield downward or motorized gear assembly to block the weighted

splash shield of the MIC2000 from being pushed upward (Branson, pp. 80-82; Sandford, pp. 150-151).

73. The simplified user interfaces on the MIC2000 are illustrated in the “SmartServe Operation Manual” that Hamilton Beach provides to all its MIC2000 customers (Williams DX10, HBBF28; Branson, p. 50; Williams, pp. 46-49; Branson, pp. 102-104). According to the “SmartServe Operation Manual,” the user is directed to place the Hershey cup in the cup holder, close the door and press the “START” button. *Id.* The MIC2000 splash shield then lowers and the MIC2000 begins to blend the Hershey milkshake. *Id.* Typically, the Hamilton Beach MIC2000 mixing blade will pass through the Hershey milkshake five times. *Id.* When mixing is finished, the MIC2000 splash shield raises back up and the MIC2000 displays shows “BLEND COMPLETE – PLEASE RINSE.” *Id.* The user then removes the cup and closes the door. *Id.* The MIC2000 will then automatically lower the splash shield into the door assembly and automatically start the rinsing cycle for a predetermined time period. *Id.* After the rinsing is complete, the splash shield is automatically raised and the MIC2000 display shows “RINSE COMPLETE.” *Id.*

74. The MIC2000 microprocessor controls operation of the MIC2000 (Williams, pp. 202-206; Branson, pp. 102-104). Among other things, the MIC2000 microprocessor: (1) controls movement of the splash shield up and down through operation of the carriage motor, (2) opens and closes the rinse nozzle valves; (3) operates the mixing blades and (4) receives inputs from the cup sensor and “START” button to begin operation of the mixing operation. *Id.*

75. Through the end of 2017, Hamilton Beach reported sales of 1,382 MIC2000 blenders to Hershey and generated \$4,768,937 in revenue from those sales (HBBF0172454; HBBF0172454). Hershey provided Hamilton Beach MIC2000 blenders to its retail customers

for use in Hershey's "Shake Shop Express" program. Hershey then sold frozen "Shake Shop Express" milkshakes and smoothies to its retail customers for use with the MIC2000 blenders (O'Flynn DX5):



76. Hamilton Beach and Hershey have demonstrated operation of the MIC2000 to customers and prospective customers on many occasions (Blackmon DX2; Williams, pp. 154-156; Branson, pp. 99-102). The customers and prospective customers have included Wawa, Sheetz, BOBs, Family Mart, Statiol, Jack & Jill Ice Cream, Nelson's Ice Cream and Freshen's (Blackmon DX2). Mr. Williams also performed MIC2000 demonstrations at Hamilton Beach's headquarters and, with Hershey, at numerous trade shows, including the National Restaurant Association trade show (Williams, pp. 154-156; Hershey's Response to f'real's Interrogatory No. 13). Mr. Branson performed MIC2000 demonstrations for Taco Bell and a college in Pennsylvania (Branson, pp. 99-102). Hamilton Beach and Hershey have also posted videos on the internet demonstrating use of the MIC2000 blender for the Shake Shop Express program.

Hershey also provides a demonstration and operating instructions to its retail customers when a MIC2000 is installed at their stores. In these demonstrations, Hamilton Beach and Hershey performed all the method steps set forth in claim 21 of the ‘662 patent (Williams, pp. 154-156; Branson, pp. 99-102; O’Flynn, pp. 162-176; Williams DX10).

77 Hershey became aware of f’real’s patents-in-suit and the possibility that they may be infringing f’real’s patents-in-suit no later than July, 2011 (Raring DX 8, 10). On June 6, 2011, Hershey’s attorney wrote to Hamilton Beach’s attorney expressing concern about whether its proposed use of Hamilton Beach’s MIC2000 blender might infringe f’real’s ‘377 patent, among other f’real patents (Raring DX8). On July 5, 2011, Hershey’s attorney wrote to Hamilton Beach’s attorney requesting assurances that Hershey’s proposed use of Hamilton Beach’s MIC2000 blender would not infringe f’real’s ‘150, ‘658 and/or ‘662 patents (Raring DX10). While Hamilton Beach responded that it had a license from f’real for f’real’s ‘150, ‘658 and ‘662 patents, Hamilton Beach refused to provide Hershey’s attorney with a copy of the f’real license. *Id.* On July 6, 2011, Hershey’s attorney again wrote to Hamilton Beach and indicated that “Hershey Creamery does not wish to have its source of blenders cut off because of termination or expiration of the f’real/Hamilton Beach license” (Raring DX11). Nonetheless, in the same e-mail, Hershey indicated that it would stop pressing its infringement concerns with Hamilton Beach if Hamilton Beach would provide Hershey with an indemnity. *Id.* On August 2, 2011, Hamilton Beach terminated its patent license with f’real (Wood DX12, HBBF685).

C. Hamilton Beach BIC2000 Blender

78. The BIC2000 is a stand alone companion to the MIC2000 blender (Williams DX6). Instead of mixing pre-filled milkshakes, the BIC2000 blender blends flavored ice drinks. *Id.* In the HBB Business Case Summary for the BIC2000, it states that: “HBB has committed to

tooling for the Cornelius Blend in Cup module to go after Taco Bell and other large chain business. The product dispenses ice and liquid ingredients into a disposable cup. The ingredients are then blended in our [IMI2000] blender modules. The target price for this machine is \$12,500. There are smoothie customers who either cannot afford the high capital investment, or will not have room to fit the large Cornelius machine. We envision these customers using existing ice machines to manually add ice to a disposable cup, and either manually adding liquid ingredients or using something like a Cornelius 'Flavor Tower' liquid dispenser. They would then take the cup of ingredients and blend in our stand alone blender module" (Williams DX 6, HBBF13038-13039).

79. As shown in the "SmartServe Operation Manual" and the BIC2000 HBB Business Case Summary, the MIC2000 and BIC2000 look identical from the outside (Williams DX10; Williams DX6). As shown in "Product Definition Spec BIC2000/BIC2000CE," the internal configuration of the BIC2000 is nearly identical to the MIC2000 (Branson, DX23-24). The primary difference between the MIC2000 and BIC2000 are: (1) they have different blade sets; (2) the MIC2000 adds water but the BIC2000 does not; (3) the cupholder and (4) the user interface (Williams, pp. 63-64; Branson, pp. 73-74). While the upper blade on the MIC2000 is curved and wave-like, the upper blade on the BIC2000 is relatively flat (Williams DX10, HBBF25).

80. Through the end of 2017, Hamilton Beach sold 9 BIC2000 blenders and generated \$27,341 in revenue from those sales (Williams DX44). Hamilton Beach has demonstrated operation of the BIC2000 to customers and prospective customers on many occasions (Blackmon DX2). These customers and prospective customers have included Del Taco, Sonic, Krispy Kreme, Quiznos, Taco Bell, Wawa, KFC, Arby's, Coca-Cola, Pepsico,

Starbucks, Yogurtland, Dairy Queen, Braums, RaceTrac, Chick-fil-A, Biscuitville, MAPCO, Boeddie Noelle, Hardees, Orange Leaf, Costa and Dunkin' Donuts (Blackmon DX2). In these demonstrations, Hamilton Beach performed all the method steps set forth in claim 21 of the '662 patent (Williams, pp. 154-156).

D. Hamilton Beach BIC3000-DQ Blender

81. Recently, Hamilton Beach made minor modifications to the MIC2000/BIC2000 blender design to create an automated blender that could be used to blend Dairy Queen "Blizzard" shakes (Wood DX23). Hamilton Beach designates this blender as the BIC3000-DQ (Blackmon DX11). As discussed in the HBB Business Case Summary for the Dairy Queen Hands Free Machine, most Dairy Queen franchisees currently use a manual \$700 mixer for blending their "Blizzard" shakes (Wood DX23; Williams, pp. 64-68; O'Flynn, pp. 162-176). Hamilton Beach intends to sell Dairy Queen franchisees a modified version of the MIC2000 which can automatically prepare the "Blizzard" shakes and then automatically clean itself. *Id.* "A huge challenge was accommodating the large range of cup sizes – being able to grip the cups effectively & mix well throughout the length of the cups with the various recipes. This was achieved by tilting the cup, having the cup rotating during the mix operation, and an innovative grip style cup holder. The design has been extensively tested in [Hamilton Beach's] kitchen, by the DQ corporate office, and there are currently five prototypes on test in stores within the US and Canada." *Id.* An advertisement picture of the BIC3000-DQ is shown below (Blackmon DX11, FREAL5877):



82. The differences between MIC2000 and the BIC3000DQ are: (1) the BIC3000-DQ is slightly taller to accommodate a taller cup; (2) the splash shield is shaped more like a hemisphere; (3) the cup holder is tilted at an angle; (4) an agitator blade is used; (5) the user interface is different; and (6) an auxiliary fan is added (Williams, pp. 31-32; GM44 Request for Quotation, HBBF14772-14782; GM44 Product Disclosure, HBBF14976-14980; BIC3000-DQ Daily Cleaning Instructions).

83. By June 2018, Hamilton Beach reported selling 77 BIC3000-DQ blenders to Dairy Queen's distributor, Wasserstrom, and generated \$385,000 in revenue from those sales (Stanford, p. 97).

84. Significantly, all of the accused Hamilton Beach blenders, the IMI2000, MIC2000, BIC2000 and BIC3000-DQ, use the same automated approach to splash shield rinsing disclosed and claimed in f'real's self-rinsing blender patents (O'Flynn, pp. 162-176; Sandford, pp. 149-150; Williams, pp.154-156; Branson, pp. 99-102; Williams DX10). In all the accused blenders, the mixing process begins by the consumer, or demonstrator in the case of the

Hamilton Beach/Hershey demonstrations, placing a cup with material to be mixed in the cup holder of the accused Hamilton Beach blender. *Id.* In each of the accused blenders, there is a splash shield positionable to shield the top opening of the cup, a rotatable mixing element extendable into the cup to mix the material in the cup and at least one nozzle pointed toward the splash shield. *Id.* After the material in the cup is mixed using the rotatable mixing element and with the splash shield shielding the cup, the splash shield is lifted so that the consumer or demonstrator can remove the blended drink. *Id.* With the drink removed, the accused Hamilton Beach blenders direct rinsing fluid onto the splash shield using the prepositioned nozzles pointed at the splash shield. *Id.*

VI. Infringement Analysis

A. U.S. Patent No. 7,520,662

85. Asserted claim 21 of the '662 patent is directed to a method for rinsing a splash shield. This method includes the steps of placing a vessel with material to be mixed in the cup holder of a mixing machine, using a splash shield to cover the opening of the cup and pointing at least one pre-positioned rinse nozzle toward the splash shield. After the material is mixed in the cup with the splash shield on top, the splash shield is removed from the cup, the cup is removed from the rinsing zone and rinse fluid is then directed onto the splash shield using the pre-positioned rinse nozzle pointed toward the splash shield.

86. I conclude that both Hamilton Beach and Hershey have infringed claim 21 of the '662 patent both directly, by inducing infringement, and by contributorily infringing. When Hamilton Beach and Hershey made their many demonstrations of the MIC2000, IMI2000, BIC2000 and BIC3000-DQ to customers and prospective customers, they directly infringed claim 21 of the '662 patent. Hamilton Beach's engineers Brian Williams and Ben Branson as

well as Hamilton Beach's marketing representative Brian O'Flynn admitted at their depositions that they performed each step set forth in claim 21 of the '662 patent during each of those demonstrations (Williams, pp. 154-156; Branson, pp. 99-102; O'Flynn, pp. 162-176). For Hershey, direct infringement of claim 21 of the '662 patent can be seen in the Shake Shop Express videos which Hershey posted on YouTube.

87. Hamilton Beach and Hershey contributorily infringed and induced infringement of claim 21 of the '662 patent by consumers for Hershey's milkshakes each time the consumer prepares a Hershey "Shake Shop Express" milkshake. Both Hamilton Beach and Hershey encouraged and instructed "Shake Shop Express" consumers to practice the method steps of claim 21 of f'real's '662 patent. Hamilton Beach provided encouragement and instruction by, among other things, providing a step-by-step guide to infringement in its Operation Manual for the MIC2000 and user interface instructions on the MIC2000 display screen (Williams DX10). For the IMI2000, Hamilton Beach provided Cornelius with IMI2000 modules and instructions to use those modules for the Cornelius drink machines. Similarly, for the BIC2000 and BIC3000-DQ, Hamilton Beach provided specialized blenders and instructions on how to use the specialized blenders. Instructions showing how to use the BIC3000-DQ can be found in internet videos posted by Hamilton Beach (see http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017). Hershey provided encouragement and instruction for infringement of claim 21 of the '662 patent by posting its "Shake Shop Express" videos on YouTube and providing user instructions at its "Shake Shop Express" display kiosks. Hershey also trained its retailers to assist "Shake Shop Express" consumers to perform the steps of claim 21 of the '662 patent.

88. Hamilton Beach and Hershey contributorily infringed claim 21 of the ‘662 patent by selling and leasing self-rinsing blenders, including the IMI2000, MIC2000, BIC2000 and BIC3000-DQ, that are specifically designed to practice the method of claim 21 of the ‘662 patent. These blenders are not typical household blenders. Instead, they are commercial products specifically designed to practice the self-rinsing blender inventions disclosed and claimed in f’real’s self-rinsing blender patents. For that reason, the accused Hamilton Beach blenders do not have a substantial non-infringing use for purposes of contributory infringement.

89. No later than July, 2011, both Hamilton Beach and Hershey knew of f’real’s patents-in-suit and knew that their “Shake Shop Express” joint venture raised infringement concerns (see Raring DX8,10). With strong prodding from Cornelius, Hamilton Beach was concerned enough about the infringement issues that it negotiated a limited license from f’real in May 2010 for f’real’s self-rinsing blender patents (Williams DX36; Wood DX3,21). Hamilton Beach recognized the need to license f’real’s self-rinsing blender patents in the “HBB Business Case Summary” for the IMI2000, noting: “[t]he method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f’REAL (who have IP in this area that we intend using) and HBB. ... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)” (UNREDACTED “HBB Business Case Summary”, HBBF171458). Nonetheless, barely a year after entering into that patent license, Hamilton Beach terminated that license (Wood DX12). By relying on indemnification from Hamilton Beach, Hershey accepted the risk that the MIC2000 may infringe the previously licensed f’real patents (Raring DX11). Thus, despite the acknowledged need for a license from

f’real, both Hamilton Beach and Hershey knew their actions were infringing f’real’s patent rights but proceeded anyway with developing and marketing the infringing MIC2000. *Id.*

90. By preparing Hershey milkshakes in the manner taught by Hamilton Beach and Hershey, the “Shake Shop Express” consumers are performing every step of claim 21 of the ‘662 patent and, thus, directly infringing claim 21 of the ‘662 patent. Similarly, users of Hamilton Beach’s IMI2000, BIC2000 and BIC3000-DQ blenders are performing every step of claim 21 of the ‘662 patent and, thus, directly infringing claim 21 of the ‘662 patent.

91. Presented below is a claim chart addressing direct, induced and contributory infringement of every element of claim 21 of the ‘662 patent by the accused products:

U.S. Patent No. 7,520,662	Comments
21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machine blenders automatically perform a method for rinsing a splash shield after the inserted drink is blended and removed (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 156-160; BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
providing a vessel containing material to be mixed, the vessel including an opening:	The cup (vessel) has a drink inside and includes a top opening (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 156-160)
further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders have a cup holder for receiving the cup, a rotatable mixing blade extendable into the cup for mixing the drink,

U.S. Patent No. 7,520,662	Comments
splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield:	a splash shield positionable to shield the top opening of the cup, and rinse nozzles oriented to spray rinse water towards inside surfaces of the splash shield (Shake Shop Express and BIC3000-DQ videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64,156-160; Branson DX23-25)
After mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.	After the MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders mix the drink in the cup while the splash shield lid is shielding the cup opening, the splash shield lid is lifted from the cup opening (unshielding) to allow the cup to be removed and then the blender automatically directs rinsing fluid onto inside surfaces of the splash shield using rinse nozzles. Since the cup is removed before the automatic rinsing, the cup is isolated from the rinsing fluid during the rinsing step (Shake Shop Express and BIC3000-DQ videos; HBBF28; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64,156-160; Branson, pp. 99-102; O’Flynn, pp. 162-170).

92. While it is my opinion that claim 21 of the ‘662 patent is being literally infringed by both Hamilton Beach and Hershey, I also believe that each element of claim 21 of the ‘662 patent is being infringed by Hamilton Beach and Hershey under the doctrine of equivalents because, to the extent literal infringement cannot be shown, each element of each step performed by them and their consumers has substantially the same function, is performed in substantially the same way and achieves substantially the same result as the literal elements of the claim.

B. U.S. Patent No. 7,520,658

93. Asserted claims 1, 5 and 6-11 of the '658 patent are directed to a mixing machine capable of self-rinsing operation and a method of using that mixing machine. As shown in claim 1 of the '658 patent, the mixing machine has a holder proportioned to receive a cup with material to be mixed, a rotatable mixing element with a shaft extendable into the cup, a motor that can either move the cup up or the rotatable mixing element down for mixing and a splash shield slidable on the rotatable mixing element shaft to cover the top opening of the cup during mixing. The splash shield in the '658 patent has sufficient mass to retain the cup in the cup holder during mixing and, during mixing, is unrestrained by mechanical forces in its ability to slide upward on the rotatable mixing element shaft. As shown in claim 6 of the '658 patent, the method is essentially using the mixing machine of claim 1 to mix the contents of the cup.

94. I conclude that both Hamilton Beach and Hershey have directly infringed apparatus claims 1 and 5 of the '658 patent by making, using, selling and/or leasing the MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machines. I further conclude that Hamilton Beach and Hershey have directly infringed method claims 6-11 of the '658 patent and indirectly infringed those same claims by inducing infringement and by contributorily infringing. By manufacturing, selling and using the MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machines, Hamilton Beach directly infringed claims 1 and 5 of the '658 patent. By providing the MIC2000 mixing machines to retail stores, such as convenience stores, after purchasing the MIC2000 mixing machines from Hamilton Beach, Hershey directly infringed apparatus claims 1 and 5 of the '658 patent. When Hamilton Beach and Hershey made their many demonstrations of the MIC2000, IMI2000, BIC2000 and BIC3000-DQ to customers and prospective customers, they directly infringed method claims 6-11 of the '658 patent. For Hershey, direct infringement

of claims 6-11 of the '658 patent can be seen in the Shake Shop Express videos which Hershey posted on YouTube.

95. Hamilton Beach and Hershey also induced the consumers of Hershey's milkshakes to infringe method claims 6-11 of the '658 patent and contributorily infringed each time the consumer prepares a Hershey "Shake Shop Express" milkshake. Both Hamilton Beach and Hershey encouraged and instructed "Shake Shop Express" consumers to practice the method steps of claims 6-11 of Hershey's '658 patent. Hamilton Beach provided encouragement and instruction by, among other things, providing a step-by-step guide to infringement in its Operation Manual for the MIC2000 and user interface instructions on the MIC2000 display screen (Williams DX10). For the IMI2000, Hamilton Beach provided Cornelius with IMI2000 modules and instructions to use those modules for the Cornelius drink machines. Similarly, for the BIC2000 and BIC3000-DQ, Hamilton Beach provided the specialized blenders and instructions on how to use the specialized blenders. Instructions showing how to use the BIC3000-DQ blenders can be found in internet videos posted by Hamilton Beach (see http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017). Hershey provided encouragement and instruction for infringement of claims 6-11 of the '658 patent by posting its "Shake Shop Express" videos on YouTube and providing user instructions at its "Shake Shop Express" display kiosks. Hershey also trained its retailers to assist "Shake Shop Express" consumers to perform the method steps of claim 6-11 of the '658 patent.

96. Hamilton Beach and Hershey contributorily infringed method claims 6-11 of the '658 patent by selling and leasing self-rinsing blenders, including the IMI-2000, MIC-2000, BIC2000 and BIC3000-DQ, that are specifically designed to practice the method of claims 6-11

of the '658 patent. These blenders are not typical household blenders. Instead, they are commercial products specifically made to practice the self-rinsing blender inventions disclosed and claimed in f'real's self-rinsing blender patents. For that reason, the accused Hamilton Beach blenders do not have a substantial non-infringing use.

97. No later than July 2011, both Hamilton Beach and Hershey knew of f'real's patents-in-suit and knew that their "Shake Shop Express" joint venture raised infringement concerns (see Raring DX8,10). With strong prodding from Cornelius, Hamilton Beach was concerned enough about the infringement issues that it negotiated a limited license from f'real in May, 2010 for f'real's self-rinsing blender patents (Williams DX36; Wood DX3,21). Hamilton Beach recognized the need to license f'real's self-rinsing blender patents in the "HBB Business Case Summary" for the IMI2000, noting: "[t]he method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f'REAL (who have IP in this area that we intend using) and HBB... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)" (UNREDACTED "HBB Business Case Summary", HBBF171458). Nonetheless, barely a year after entering into that patent license, Hamilton Beach terminated that license (Wood DX12). By relying on indemnification from Hamilton Beach, Hershey accepted the risk that the MIC2000 may infringe the previously licensed f'real patents (Raring DX11). Thus, despite the acknowledged need for a license from f'real, both Hamilton Beach and Hershey knew their actions were infringing f'real's patent rights but proceeded anyway with developing and marketing the infringing MIC2000. *Id.*

98. By preparing Hershey milkshakes in the manner taught by Hamilton Beach and Hershey, the "Shake Shop Express" consumers are performing every step of claims 6-11 of the

‘658 patent and, thus, directly infringing claims 6-11 of the ‘658 patent. Similarly, consumers for Hamilton Beach’s IMI2000, BIC2000 and BIC3000-DQ blenders are performing every step of claims 6-11 of the ‘658 patent and, thus, directly infringing claims 6-11 of the ‘658 patent.

99. The MIC2000, IMI2000, BIC2000 and BIC3000-DQ blenders have a splash shield of “sufficient mass to retain the vessel within the holder” during blending and are “unrestrained against sliding movement on the shaft in a direction away from the opening” within the meaning of the asserted ‘658 patent claims. The “sufficient mass” and “unrestrained against” limitations were inserted into the ‘658 patent claims to distinguish the prior art mechanical approaches of using springs or a mechanized gear assembly to hold the splash shield down against the cup in a way that would retain the cup in the cupholder during mixing (see ‘658 patent, 3:65-4:3). Unlike the prior art mechanical approaches, the ‘658 patent’s solution of a weighted splash shield allows nearly constant pressure to be applied to the top of the cup during mixing while allowing relatively free movement of the splash shield during the blending process. The prior art spring and mechanized gear assembly approaches, by contrast, would apply inconsistent pressure to the top of a vertically moving cup. Significantly, Hamilton Beach rejected both of the prior art mechanical approaches of using springs or a mechanized gear assembly when they designed their splash shield assemblies for the MIC2000, IMI2000, BIC2000 and BIC3000-DQ. Instead, Hamilton Beach copied f’real’s patented approach of using a weighted splash shield mounted on the rotatable mixing spindle shaft. The success of using f’real’s weighted splash shield approach “prevent[ed] the cup from rotating during the mix cycle” (see Williams DX8, HBBF12114).

100. It makes no functional difference that Hamilton Beach creates its weighted splash shield by placing a heavy cast iron weight on top of the plastic portion of its splash shield rather

than making the entire splash shield of heavier materials as f'real does. Both approaches create a splash shield of "sufficient mass" within the meaning of the '658 claims and, thus, are functionally the same. Further, the fact that Hamilton Beach's weighted splash shield works in cooperation with Hamilton Beach's cup holder does not avoid infringement. Both the specification and claims of the '658 patent recite a weighted splash shield working in conjunction with a cup holder. Although there theoretically could be minor friction on the guide rods holding Hamilton Beach's cast iron weight that may inhibit "unrestrained" upward movement of Hamilton Beach's splash shield during mixing, Hamilton Beach's engineers freely acknowledge that the purpose of the splash shield design "has always been for it to fall under its own weight" (Branson, p. 110; Williams, pp. 127-130). To accomplish that objective, Hamilton Beach uses "lubricious" materials for the seals and bushings coming in contact with Hamilton Beach's spindle and guide rods. *Id.* It is also possible that there could be friction between f'real's rotatable spindle and f'real's weighted splash shield that could inhibit the "unrestrained" upward movement of f'real's weighted splash shield. Nonetheless, these incidental frictional contacts are not the type of "mechanical means" (e.g., springs, gear assemblies) to hold down the splash shield that the weighted f'real splash shield was designed to avoid. Within the context of the '658 patent disclosure and the real world, Hamilton Beach has plainly appropriated f'real's invention of a splash shield having "sufficient mass" that is "unrestrained" as it moves upward during the mixing process.

101. Presented below is a chart detailing how both Hamilton Beach and Hershey have directly infringed, induced infringement, and contributed to the infringement of every element of claims 1, 5 and 6-11 of the '658 patent:

U.S. Patent No. 7,520,658	Comments
1. A mixing machine for mixing a liquid in a vessel having an opening, the mixing machine comprising:	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machine blenders mix a liquid drink contained in a cup (vessel) with a top opening (Shake Shop Express videos: https://www.youtube.com/watch?v=h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29 “Water Scale”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25; BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
a holder coupled to the mixing machine, the holder proportioned to receive a vessel;	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a cup holder proportioned to receive a cup (Shake Shop Express and MIC/BIC3000-D videos; HBBF 25 “Cup Holder”, HBBF43; physical inspection of MIC2000; Williams pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a rotatable blending/mixing blade element that is extendable through the top opening of the cup positioned in the cup holder for mixing the drink contents contained in the cup (Shake Shop Express and BIC3000-DQ videos; HBBF322, HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a carriage stepper motor operatively coupled to the mixing blade to effect axial translation of the mixing

U.S. Patent No. 7,520,658	Comments
positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;	blade from a first (in this case lower) mixing position to a second (in this case higher) mixing position, the mixing blade being positioned further from the cup opening when in the first (lower) mixing position than in the second (higher) mixing position (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a shaft; and	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a mixing shaft between the mixing motor and mixing blade element (physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a splash shield slidable on the mixing shaft (through an aperture in the splash shield lid) between a first (in this case higher) splash shield position and a second (in this case lower) splash shield position, the splash shield in the second (lower) position positionable with its splash shield lid covering the cup opening and being unrestrained against a sliding movement on the mixing shaft in a direction away from the cup opening, the splash shield having sufficient mass (when its lid covers the cup opening), in part by virtue of its heavy cast iron guide rod weight, to retain the cup within the cup holder during relative axial movement of the mixing blade and the cup from the first (higher) shield position to the second (lower) shield position when liquid is present in the cup (Shake Shop Express and MIC/BIC3000-DQ videos; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25).

U.S. Patent No. 7,520,658	Comments
5. The mixing machine of claim 1, wherein the splash shield has a mass of approximately 5 lbs.	The Hamilton Beach MIC2000 splash shield assembly was measured to weigh 3.74 lbs. It is believed the BIC2000, BIC3000-DQ and IMI2000 splash shields have a comparable weight (physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
6. A method for retaining a vessel in a holder while mixing the contents of the vessel, the method comprising the steps of:	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 mixing machine blenders each retain a cup in a cup holder while mixing the contents of the cup (Shake Shop Express and BIC3000-DQ videos; HBBF 25 “Cup Holder”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
providing a vessel containing contents to be mixed, the vessel including an opening;	The cup (vessel) has contents to be mixed inside and includes a top opening (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
further providing a mixing machine having a holder on the mixing machine for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, and a shield;	The Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders each have a cup holder for receiving the cup, a rotatable mixing blade extendable into the cup for mixing the cup contents and a splash shield to shield the top opening of the cup (Shake Shop Express and BIC3000-DQ videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
positioning the vessel in the holder;	After selecting a cup with contents to be mixed, the user places the cup in the MIC2000, BIC2000, BIC3000-DQ or IMI2000 cupholder (Shake Shop Express and BIC3000-DQ videos; HBBF 25 “Cup Holder”; physical inspection of MIC2000; Williams pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
positioning the shield in contact with the	After the user presses the START button, the

U.S. Patent No. 7,520,658	Comments
vessel to cover the opening of the vessel, the shield when contacting the vessel being unrestrained against upward movement away from the opening; and	Hamilton Beach MIC2000, BIC2000, BIC3000-DQ and IMI2000 blender positions its splash shield in contact with the top of the cup to cover its top opening, the splash shield is slidable on the mixing shaft (through an aperture in the splash shield lid) in a way that is unrestrained against an upward movement on the mixing shaft in a direction away from the cup opening (Shake Shop Express and BIC3000-DQ videos; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25).
with the vessel positioned in the holder, using a motor to translate at least one of the mixing element and the holder such that the mixing element passes through the contents of the vessel, the mass of the splash shield preventing separation of the holder and the vessel during translation.	With the cup positioned in the cup-receiving holder, the MIC2000, BIC2000, BIC3000-DQ and IMI2000 carriage stepper motor axially translates the mixing blade up and down such that the mixing blade passes through the contents of the cup while the mass of the splash shield prevents separation of the cup from the cup-receiving holder during translation. A cast iron guide rod weight is placed on top of the upper stop plate of the splash shield assembly to better insure there is no separation of the cup from the cup-receiving holder during translation and blending (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
7. The method of claim 6, wherein the method further includes the step of rotating the mixing element to mix the contents of the vessel	The MIC2000, BIC2000, BIC3000-DQ and IMI2000 each use their mixing motor to rotate the mixing blade to mix the contents in the cup (Shake Shop Express videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
8. The method of claim 7 wherein translating the mixing element includes translating the mixing element while	The MIC 2000, BIC2000, BIC3000-DQ and IMI2000 carriage stepper motors each translate the mixing blade up and down while the mixing blade is

U.S. Patent No. 7,520,658	Comments
rotating the mixing element to mix the contents of the vessel.	mixing the contents of the cup (Shake Shop Express videos; HBBF28, HBBF322; HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
9. The method of claim 6, wherein the method further includes containing a substantial portion of contents splashing from the vessel within the shield or vessel.	The MIC2000, BIC2000, BIC3000-DQ and IMI2000 splash shields prevent a substantial portion of the contents in the cup from splashing out during the blending/mixing process (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25)
10. The method of claim 6, wherein the contents of the vessel are at least partially frozen.	The contents of the cup are at least partially frozen. For the MIC2000 in the Shake Shop Express kiosks, frozen Hershey milkshakes are used. For the BIC3000-DQ, frozen ice cream is used. For the BIC2000 and IMI2000, ice is mixed with flavorings (Shake Shop Express and MIC/BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
11. The method of claim 6, wherein the contents comprise frozen milkshake ingredients.	The contents in the Hershey cups in the Shake Shop Express kiosks where the Hamilton Beach MIC2000 blenders are used comprise frozen milkshake ingredients. The ice cream used in the BIC3000-DQ is also a milkshake ingredient (Shake Shop Express and BIC3000-DQ videos; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)

102. While it is my opinion that claims 1, 5 and 6-11 of the ‘658 patent are being literally infringed by both Hamilton Beach and Hershey, to the extent literal infringement cannot be shown, each element of claims 1, 5 and 6-11 of the ‘658 patent are being infringed by Hamilton Beach and Hershey under the doctrine of equivalents because the accused products, and each claim method performed by them and their consumers, has substantially the same

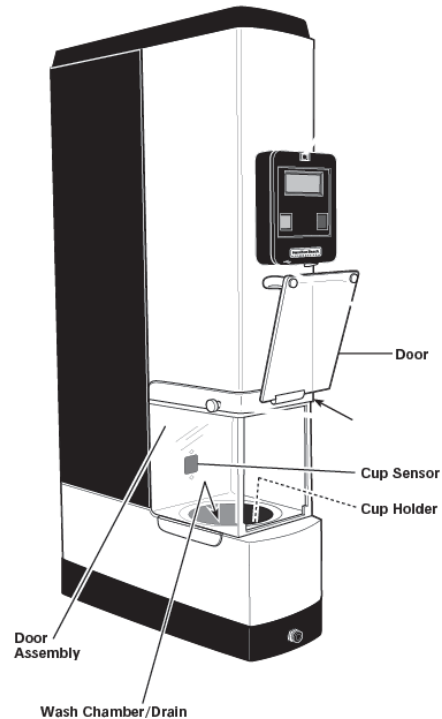
function, is performed in substantially the same way and achieves substantially the same result as the literal elements of the claims.

C. U.S. Patent No. 7,144,150

103. Asserted claims 15, 20 and 22 of the ‘150 patent are directed to a mixing machine capable of self-rinsing operation. As recited in independent claim 15 of the ‘150 patent, the mixing machine has a rotatable mixing element extendable into a cup for mixing the contents of the cup, a rinse chamber in the mixing machine having an entrance and a door covering the entrance, a splash shield positionable to cover the top opening of the cup and at least one nozzle coupled to a source of rinse fluid and positioned to direct rinse fluid onto the splash shield within the rinse chamber. Dependent claim 20 adds the limitation of having at least one nozzle oriented to direct rinse fluid onto the mixing element and dependent claim 22 adds the limitation of having a splash shield of sufficient mass to retain the vessel in the holding during mixing.

104. I conclude that both Hamilton Beach and Hershey have directly infringed claims 15, 20 and 22 of the ‘150 patent by making, using (e.g., demonstrating), selling and/or leasing the MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders.

105. The accused MIC2000, BIC2000, and BIC3000-DQ blenders have a “rinse chamber having an entrance and a door movable to a closed position covering the entrance.” For the MIC2000 and BIC2000 blenders, their “SmartServe Operation Manual” illustrates such a “rinse chamber” as being the combination of the “door assembly” and “door” (“SmartServe Operation Manual”, Williams DX10, HBBF25). When the door is raised as shown in the illustration below, an entrance for the cup can easily be seen. *Id.*



The door is then movable downward to a closed position to cover the entrance. As shown by the photograph below, a rinse manifold is positioned at the bottom of this rinse chamber where the “Wash Chamber/Drain” arrow is pointing in the “SmartServe Operation Manual” illustration shown above:



A similar rinse chamber arrangement can be seen in the BIC3000-DQ (Blackmon DX11; GM44 Request for Quotation, HBBF14772-14782; GM44 Product Disclosure, HBBF14976-14980; BIC3000-DQ Daily Cleaning Instructions).

106. The addition of a removable splash shield inside the “wash chamber” of the MIC2000, BIC2000, and BIC3000-DQ blenders does not negate such “wash chamber” being a “rinse chamber” within the meaning of the ‘150 patent claims. The Court construed “rinse chamber” in the ‘150 patent to mean simply “an enclosure in which a rinse apparatus is positioned to provide rinsing.” The combination of the door assembly, the door, and the rinse manifold in the MIC2000, BIC2000 and BIC3000-DQ blenders satisfies the “rinse chamber” claim limitations as defined by the Court. Additionally, “sufficient mass” of the splash shield within the meaning of claim 22 of the ‘150 patent has already been addressed in connection with my ‘658 patent discussion.

107. Presented below is a chart detailing how the accused products directly infringe every element of claims 15, 20 and 22 of the ‘150 patent:

U.S. Patent No. 7,144,150	Comments
15. On a mixing machine for mixing a liquid contained in a vessel having an opening,	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders each mix liquids in a cup (vessel) having an opening at its top (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29 “Water Scale”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160; Branson DX23-25; BIC3000-DQ videos: http://info.hamiltonbeachcommercial.com/dairy-queen-hands-free-blizzard?utm_source=DQCommunications&utm_campaign=HFBM_launch2017)
the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing the contents of the	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ each have a rotatable mixing blade element extendable into the cup for mixing the

U.S. Patent No. 7,144,150	Comments
vessel, the improvement comprising:	contents of the cup (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25; HBBF322, HBBF441; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ blenders each have a door assembly rinse chamber where rinsing occurs, the door assembly rinse chamber having a front opening serving as an entrance for the cup and a pivotable door moveable to a closed position covering that entrance (Shake Shop Express and BIC3000-DQ videos; HBBF227 “Door Assembly”; physical inspection of MIC2000; Branson DX23-25; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders each carry a splash shield which is positionable so that its splash shield lid covers the top opening of the cup (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams Dep., pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).
at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders each have multiple nozzles coupled, through a water hose opening at the back of the blender, to a source of rinse fluid. The nozzles are oriented to direct rinse fluid onto the splash shield within the door assembly rinse chamber (Shake Shop Express and MIC/BIC3000-DQ videos; Branson DX23-25; HBBF231 “Auto-Rinse”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
20. The improvement of claim 15, wherein at least one nozzle is oriented to direct rinse fluid onto the mixing element	The Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ nozzles apply rinsing fluid onto the mixing blade and the splash shield (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25;

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	HBBF227, “Water Hose Opening”; HBBF231 “Auto-Rinse”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160)
22. The improvement of claim 15, wherein the splash shield is of sufficient mass to retain the vessel within the holder during relative movement of the mixing element and vessel in opposite directions	The splash shield in the Hamilton Beach MIC2000, BIC2000 and BIC3000-DQ mixing machine blenders are each of sufficient mass to retain the cup within the cupholder during relative movement of the mixing blade and cup in opposite directions. A cast iron guide rod weight is placed on top of the shield to insure there is no separation of the cup from the cup-receiving holder during blending (Shake Shop Express and BIC3000-DQ videos; Branson DX23-25; HBBF227 “Removable Splash Shield”; physical inspection of MIC2000; Williams, pp. 15-17, 31-32, 46-49, 63-64, 120-124, 156-160).

108. While it is my opinion that claims 15, 20 and 22 of the ‘150 patent are literally infringed by the accused products, to the extent literal infringement is not shown, each element of claims 15, 20 and 22 of the ‘150 patent are being infringed under the doctrine of equivalents because each corresponding element of the accused products has substantially the same function, perform in substantially the same way and achieves substantially the same result as the corresponding elements of the claims.

D. U.S. Patent No. 5,803,377

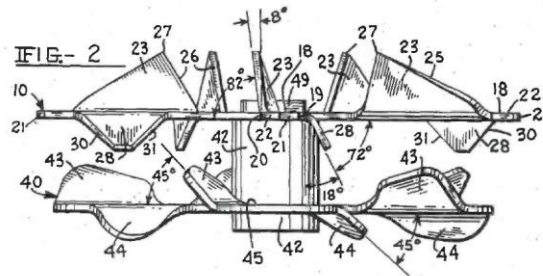
109. Asserted claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent are directed to a mixing machine capable of reconstituting a frozen drink, such as a milkshake or smoothie, to a desired texture. For a milkshake, the desired texture is typically a thick, creamy texture. In the broadest asserted claims of the ‘377 patent (e.g., independent claims 1 and 11), the mixing machine includes a housing, a cup support, a liquid dispenser, a rotatable blade assembly,

grinding means/shaving elements and aeration means. The asserted dependent claims of the ‘377 patent include features to detect the presence of a cup (e.g., claims 6, 9, 19 and 22), features of the grinding means/shaving elements, aeration elements or liquid dispenser (e.g., claims 2-3 and 13-14) and motorized movement of the carriage holding the blade assembly (e.g., claims 20-22).

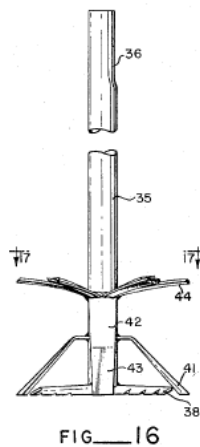
110. I conclude that both Hamilton Beach and Hershey have directly infringed claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent by making, using (e.g., demonstrating), selling and/or leasing the MIC2000 blenders.

111. The accused MIC2000 blenders have “grinding means/shaving elements” and “aeration means.” The Court construed “grinding means” as a “means-plus-function” term where the claimed function is “grinding the frozen substance to form a ground substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile.” Similarly, the Court defined “shaving elements” as a “means-plus-function” term where the claimed function is “shaving a frozen substance” and the corresponding structure is “sharp depressed edge(s) of a rotatable blade having a slim cross-sectional profile.” The MIC2000 uses a blade assembly with two slim blades. According to its designer, Ben Branson, the lower MIC2000 blade is modeled after a “post hole digger” with a depressed “sharpened edge” designed to be able to “shave” through frozen Hershey milkshake and mix-ins, such as chocolate chips (Branson, pp. 53-54; Pryor, pp. 68-72). This lower MIC2000 blade is the “grinding means” and “shaving elements” set forth in the asserted ‘377 claims. With regard to whether they can be considered to have a “slim cross-sectional profile,” it is useful to consider the Stiffler and Tomlinson ‘997 prior art patents Hamilton Beach argued had “grinding means” and “shaving elements.” As illustrated below, the Stiffler patent shows blades with sharp bends

that protrude widely out of the plane where the blade is attached to the rotatable mixing element (Williams DX43):



Mr. Williams testified that using this type of sharply bent blade with a wider cross-sectional profile for the accused Hamilton Beach blenders is “not good engineering practice.” Similarly, as shown below, the Tomlinson ‘997 patent has a complicated assembly of multiple blades that assumes a wider cross-sectional profile.



Again, Hamilton Beach avoided the wider blade option of the prior art and adopted f’real’s approach of using a blade with a thin cross-sectional profile.

112. Turning now to “aeration means,” the Court construed “aeration means” as a means-plus-function term where the claimed function is “causing air to be incorporated into a mixture” and the corresponding structure is “curved, wave-like structure(s) on a rotatable blade with a slim cross-sectional profile.” According to its designer, Ben Branson, the upper MIC2000

blade is modeled after a “boat propeller” in the sense it is “curved in multiple planes” (Branson, pp. 44-47). Mr. Branson testified that the Hamilton Beach MIC2000 blades (and added water) initially “de-aerate” the frozen Hershey milkshake (Branson, pp. 38-39). Mr. Branson also testified that his “boat propeller” design for the upper MIC2000 blade creates a high velocity flow turbulence resulting in air bubbles when the turbulence hits the top surface of the milkshake (Branson, pp. 44-47). Although Mr. Branson refused to acknowledge at his deposition that his “boat propeller” MIC2000 blade re-aerates the Hershey milkshake after de-aerating it, this is borne out by testing. To determine if the Hershey milkshake is being re-aerated by the “boat propeller” blade, f’real conducted scientific tests of the MIC2000 blender around the time I did my inspection of the MIC2000 blender. The results of these tests are attached as Exhibit B to this report. The tests were conducted in a scientifically-valid manner and their results make sense. For that reason, I am adopting the scientific aeration tests conducted by f’real as part of my expert report testimony. As shown by the aeration tests of attached Exhibit B, the Hamilton Beach “boat propeller” blade does re-aerate the Hershey milkshake within the meaning of the ‘377 patent claims. With regards to whether Mr. Branson’s upper “boat propeller” aeration blade can be considered to have a “slim cross-sectional profile,” I believe it has a slim cross-sectional profile for the reasons I just explained for Mr. Branson’s lower “grinding means/shaving elements” blade. I also believe that the two MIC2000 blades considered together have a “slim cross-sectional” profile.

113. Presented below is a chart detailing how the MIC2000 directly infringes every element of claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent:

U.S. Patent No. 5,803,377	Comments
1. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes frozen into a Hershey cup. Hershey's "frozen ice cream" milkshakes are stored before use in a freezer at between 2-3°F (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Branson Ex. 24; Williams DX8, Guzdar DX3; Hamilton Beach SmartServe Operation Manual, HBBF23-29; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to contain its motors and other blending components (Shake Shop Express videos; Branson Ex. 24; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 has a cup holder mounted to the housing (Shake Shop Express videos; Branson Ex. 24; HBBF25, "Cup Holder"; HBBF43; Williams Dep.; physical inspection of MIC2000)
a liquid dispenser having an outlet positioned to direct liquid into a cup positioned in the cup support;	The Hamilton Beach MIC2000 has a liquid dispenser with an outlet positioned to dispense water into a Hershey cup positioned in the cup holder (Shake Shop Express videos; HBBF29, "Water Scale"; Williams Dep.; physical inspection of MIC2000; Branson Ex. 24)
grinding means for, when a cup containing a frozen substance is positioned in the cup support, grinding the frozen substance to form a ground substance; and	The Hamilton Beach MIC2000 has a lower mixing blade of slim cross-sectional profile with a sharp depressed edge for grinding the frozen Hershey milkshake to form a ground milkshake when the Hershey frozen milkshake cup is positioned in the cup holder (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
aeration means for, when a cup containing a frozen substance is	The Hamilton Beach MIC2000 has a mixing blade of slim cross-sectional profile with a curved, wave-like

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positioned in the cup support, causing air to be incorporated into a mixture of the ground substance formed by the grinding means and the liquid dispensed by the liquid dispenser	shape for causing air to be incorporated into the mixture of the ground frozen milkshake and dispensed water when the Hershey milkshake cup is positioned in the cup holder (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
2. The apparatus of claim 1 wherein the grinding and aeration means comprise a rotatable blade assembly mounted within the housing for extension into a cup positioned in the cup support.	The Hamilton Beach MIC2000 mixing blades which perform the grinding and aeration functions are a rotatable blade assembly connected to the mixing motor within the MIC2000 housing for extension into a Hershey milkshake cup held in the MIC2000 cup holder (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
3. The apparatus of claim 2 wherein the blade assembly includes a blade member mounted on a shaft,	The Hamilton Beach MIC2000 has mixing blade assembly mounted on a shaft (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade member including first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade member in a fluid, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect.	The Hamilton Beach MIC2000 mixing blade assembly has regions which are spaced apart and on different planes such that, during rotation of the blade assembly, the aeration elements cause alternately high and low pressure zones in the fluid and thus create turbulent eddies which cause a whipping effect (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
4. The apparatus of claim 2 wherein the blade assembly is moveable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom, and	Through use of a carriage stepper motor, the mixing blade in the Hamilton Beach MIC2000 is moveable between upper and lower blade positions, the lower blade position reaching the bottom of the Hershey cup when the Hershey cup is in the MIC2000 cup holder (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
wherein the apparatus further includes control means for causing the blade	The Hamilton Beach MIC2000 has a control panel which moves the mixing blade assembly between the

U.S. Patent No. 5,803,377	Comments
assembly to move between the upper and lower blade positions at least twice.	upper and lower blade positions at least twice during the mixing and rinsing processes (Shake Shop Express videos; HBBF28, “Blending or Mixing Instructions”, HBBF25, “Control Panel/Display”; Branson Ex. 24; Branson pp. 102-104; Williams Dep.; physical inspection of MIC2000)
6. The apparatus of claim 2 further comprising: an initiation switch;	On its control panel, the Hamilton Beach MIC2000 has a “START” button to initiate the mixing/blending process (Shake Shop Express videos; HBBF25, HBBF28; Williams Dep.; physical inspection of MIC2000)
a cup sensor for detecting the presence of a cup in the cup support and for producing an output;	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size is in the cup-receiving holder and for producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating up and down blade movement control signals and blade rotation control signals;	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the MIC2000 control panel will automatically generate appropriate up and down blade movement control signals and blade rotation control signals (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a slidable and rotatable shaft attached to the blade assembly and moveable between upper and lower positions corresponding to upper and lower blade positions;	The MIC2000 has a rotatable shaft between the mixing motor and mixing blade assembly which is slidable with respect to the splash shield and moveable between upper and lower positions corresponding to upper and lower blade positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
first and second motors coupled to the shaft,	In the MIC2000, a (first) carriage stepper motor is coupled to the shaft through a carriage to move the shaft up and down and a (second) mixing motor is

U.S. Patent No. 5,803,377	Comments
	coupled to the shaft to rotate the shaft (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the first motor responsive to the blade movement control signals to move the shaft between the upper and lower positions,	The (first) carriage stepper motor is responsive to blade movement control signals from the MIC2000 control panel to move the shaft between upper and lower positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the second motor responsive to the blade rotation control signals to rotate the blade assembly,	The (second) mixing motor is responsive to blade rotation control signals from the MIC2000 control panel to rotate the blade assembly (Shake Shop Express videos; Williams Dep.; physical inspection of MIC2000)
the control means responsive to activation of the initiation switch and to output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.	The MIC2000 control panel prevents the carriage stepper and mixing motors from operating unless a cup of appropriate size is detected in the cup-receiving holder and the user presses the “START” button on the control panel (Shake Shop Express videos; HBBF 25, HBBF28 “Blending or Mixing Instructions”, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
9. The apparatus of claim 1 further comprising: a cup sensor for detecting a characteristic of a cup in the cup support and for producing an output corresponding to the characteristic of the cup; and	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size is present in the cup-receiving holder and for producing a corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispenser being responsive to the liquid dispensing control signals to dispense liquid into the cup.	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the control panel will direct the MIC2000 to dispense an appropriate amount of water into a Hershey cup positioned in the cup receiving holder (Shake Shop Express videos; HBBF29, “Water

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	Scale”; Williams Dep.; physical inspection of MIC2000)
11. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes contained in a Hershey cup (Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to hold its motor and blending components (Shake Shop Express videos; Branson Ex. 24; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 has a cup holder mounted to the blender housing (Shake Shop Express videos; Branson Ex. 24; HBBF25, “Cup Holder”; HBBF43; Williams Dep.; physical inspection of MIC2000)
a rotatable blade assembly mounted within the housing,	The Hamilton Beach MIC2000 has a rotatable blade assembly mounted within the blender housing (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade assembly including shaving elements and aeration elements,	The Hamilton Beach MIC2000 has a mixing blade assembly of slim cross-sectional profile with a sharp depressed edge for shaving the frozen Hershey milkshake and a curved, wave-like shape for aerating the frozen Hershey milkshake (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade assembly movable between upper and lower blade positions, the lower blade position being at a height such that when a cup is positioned in the	Through use of a carriage stepper motor, the mixing blade assembly in the Hamilton Beach MIC2000 is moveable between upper and lower blade positions, the lower blade position reaching the bottom of the

U.S. Patent No. 5,803,377	Comments
cup support, the blade assembly is positioned within the cup and adjacent to the cup bottom.	Hershey cup when the Hershey cup is in the MIC2000 cup holder (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
12. The apparatus of claim 11 characterized further in that the blade assembly includes at least one surface area shaped to pump fluid toward the bottom of the cup in response to rotation of the blade assembly.	The MIC2000 rotatable blade assembly is designed to pump milkshake toward the bottom of the Hershey cup during rotation (Shake Shop Express videos; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
13. The apparatus of claim 11 wherein the blade assembly shaving elements and aeration elements are in close vertical proximity to one another.	The sharp depressed edges for shaving and curved, wave-like shape for aerating on the Hamilton Beach cutting blade assembly are in close vertical proximity to one another (HBBF322, HBBF441; physical inspection of MIC2000)
14. The apparatus of claim 11 wherein the aeration elements include first regions lying within a plane and spaced apart regions at least partially outside the plane such that during rotation of the blade assembly in a fluid the aeration elements cause alternately high and low pressure zones in the fluid, and thus create turbulent eddies which cause a whipping effect.	The aeration elements of the Hamilton Beach MIC2000 include regions which are spaced apart and on different planes, such that rotation of the aeration elements in the Hershey milkshake cause alternately high and low pressure zones in the milkshake and thus create turbulent eddies which cause a whipping effect (Shake Shop Express videos; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
18. The apparatus of claim 11 wherein the apparatus further includes control means for causing the blade assembly to move between the upper and lower blade positions at least twice.	The Hamilton Beach MIC2000 has a control panel which directs the mixing blade assembly between the upper and lower blade positions at least twice during the mixing and rinsing processes (Shake Shop Express videos; HBBF28, "Blending or Mixing Instructions"; Branson Ex. 24; HBBF25 "Control Panel/Display"; Williams Dep.; physical inspection of MIC2000)
19. The apparatus of claim 11 further including: an initiation switch configured to produce an output when activated by a user;	The Hamilton Beach MIC2000 has a "START" button on its control panel to produce an output signal for initiation of the blending process when the "START" button is pressed by the user (Shake Shop Express videos; HBBF25, "Control Panel/Display"; HBBF28, "Blending or Mixing Instructions"; Williams Dep.;

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	physical inspection of MIC2000)
a cup sensor for detecting the presence of a cup in the cup support and for producing an output;	The Hamilton Beach MIC2000 has a cup sensor to detect the presence of a cup in the cup holder and convey that information to the control circuitry (Shake Shop Express videos; HBBF25, “Cup Sensor”; Williams Dep.; physical inspection of MIC2000)
control means responsive to activation of the initiation switch and to the output of the cup sensor to cause the blade assembly to rotate and to be lowered into a cup when a cup is positioned into the cup support when a cup is detected in the cup support and when a user activates the initiation switch.	After the user presses the “START” button on the control panel and the cup sensor confirms to the control panel after detection that a cup is present in the cup holder, the MIC2000 control panel will cause the mixing blade to rotate and be lowered into the Hershey cup (Shake Shop Express videos; HBBF25, “Control Panel/Display”; HBBF28, “Blending or Mixing Instructions”; Williams Dep.; physical inspection of MIC2000).
20. The apparatus of claim 11 further comprising: a threaded guide rod mounted within the housing;	The Hamilton Beach MIC2000 has threaded lead screws mounted within the housing (Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a slidable and rotatable blade shaft having the blade assembly attached thereto,	The Hamilton Beach MIC2000 mixing blade assembly is attached to a rotatable mixing shaft that is slidable up and down with respect to the Hershey cup and the MIC2000 splash shield (Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the blade shaft drivable between upper and lower positions by rotation of the threaded guide rod; and	The Hamilton Beach MIC2000 rotatable mixing shaft is drivable up and down by rotation of the threaded lead screws (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a first motor coupled to the threaded rod for driving the slidable and rotatable blade shaft between upper and lower positions corresponding to the upper and lower blade positions.	The Hamilton Beach MIC2000 has a stepper motor for driving the rotatable mixing shaft up and down in positions corresponding to the upper and lower mixing blade positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
21. The apparatus of claim 20 wherein:	The MIC2000 control panel generates signals to

U.S. Patent No. 5,803,377	Comments
the apparatus further includes control means for generating slidable blade shaft rotation control signals,	control the operation of the rotatable mixing blade assembly, which is slidable with respect to the Hershey cup and the MIC2000 splash shield (Shake Shop Express videos; HBBF25, HBBF27; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the first motor responsive to the slidable blade shaft movement control signals to move the slidable blade shaft between the upper and lower positions; and	The (first) carriage stepper motor is responsive to blade movement control signals from the MIC2000 control panel to move the shaft between upper and lower positions (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
a second motor responsive to the blade rotation control signals to rotate the blade assembly	The (second) mixing motor is responsive to blade rotation control signals from the MIC2000 control panel to rotate the blade assembly (Shake Shop Express videos; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
22. The apparatus of claim 21 wherein: the apparatus further comprises an initiation switch and a cup sensor for detecting the presence of a cup in the cup support and for producing an output; and	On its control panel, the Hamilton Beach MIC2000 has a “START” button to initiate the mixing/blending process and a cup sensor for detecting whether a cup of appropriate size resides in the cup-receiving holder, both producing an output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF28, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
the control means is further for generating the blade movement control signals in response to activation of the initiation switch and the output of the cup sensor to allow the blade assembly to rotate and to be lowered into a cup when a cup is detected in the cup support and when a user activates the initiation switch.	The MIC2000 control panel prevents the blade assembly from rotating and being lowered into the Hershey cup unless a cup of appropriate size is detected in the cup-receiving holder and the user presses the “START” button on the control panel (Shake Shop Express videos; HBBF 25, HBBF28 “Blending or Mixing Instructions”, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
25. The apparatus of claim 11, further comprising a cup sensor for detecting a characteristic of a cup in the cup support	The Hamilton Beach MIC2000 has a cup sensor for detecting whether a cup of appropriate size resides in the cup-receiving holder and for producing a

U.S. Patent No. 5,803,377	Comments
and for producing an output corresponding to the characteristic of the cup; and	corresponding output signal to the control panel (Shake Shop Express videos; HBBF 25, HBBF 29 “Cup Sensor”; Branson Ex. 24; Williams Dep.; physical inspection of MIC2000)
control means for generating liquid dispensing control signals which correspond to the characteristic of the cup detected by the cup sensor, the liquid dispensing being responsive to the liquid dispensing control signals.	If the MIC2000 cup sensor detects a cup of appropriate size in the cup receiving holder and provides corresponding notification to the control panel, the control panel will direct the MIC2000 to dispense an appropriate amount of water into a Hershey cup positioned in the cup receiving holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; physical inspection of MIC2000)
27. An apparatus for making frozen drinks from a frozen substance frozen into a cup, comprising:	The Hamilton Beach MIC2000 is an apparatus for making frozen milkshake drinks from frozen milkshakes frozen in a Hershey cup. Hershey’s “frozen ice cream” milkshakes are stored before use in a freezer at between 2-3°F (Williams DX8; Guzdar DX3; Branson DX24; Shake Shop Express videos: https://www.youtube.com/watch?v=-h7D9d9-S5M ; https://www.youtube.com/watch?v=GKZmxM5PpEE ; Hamilton Beach SmartServe Operation Manual, HBBF23-29, “Auto-Rinse”; Williams Dep.; physical inspection of MIC2000)
a housing;	The Hamilton Beach MIC2000 blender has a housing to hold its motor and blending components (Shake Shop Express videos; Branson Ex. 24; HBBF227, HBBF318; Williams Dep.; physical inspection of MIC2000)
a cup support mounted to the housing;	The Hamilton Beach MIC2000 blender has a cup holder mounted to the blender housing (Shake Shop Express videos; ‘823 patent, cup-receiving holder 40; HBBF25, “Cup Holder”; HBBF43; Williams Dep.; physical inspection of MIC2000)
a liquid dispenser having an outlet positioned to direct a predetermined volume of liquid into a cup position in	The Hamilton Beach MIC2000 blender has a liquid dispenser with an outlet positioned to dispense a predetermined volume of water into a Hershey cup

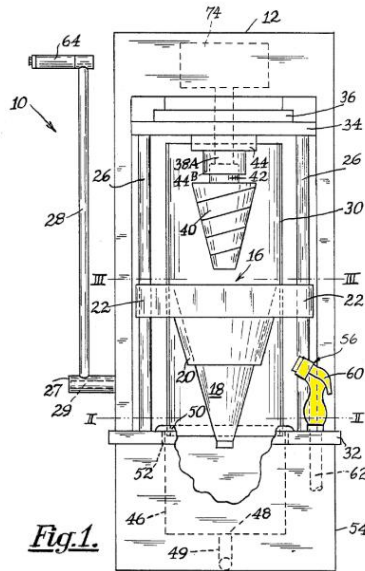
U.S. Patent No. 5,803,377	Comments
the cup support;	positioned in the cup holder (Shake Shop Express videos; HBBF29, “Water Scale”; Williams Dep.; Branson Ex. 24; physical inspection of MIC2000)
a shaft mounted to the housing the shaft carrying a rotatable blade having shaving elements and aeration elements formed thereon,	The Hamilton Beach MIC2000 blender has a mixing shaft mounted in the housing (through its connection to a mixing motor) and carries a rotatable mixing blade of slim cross-sectional profile at its distal end having shaving elements (sharp depressed edges) and aeration elements (curved, wave-like surfaces) formed thereon (Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)
the shaft moveable relative to the housing to carry the blade between an upper blade position remote from the cup support and a lower blade position adjacent to the cup support,	The Hamilton Beach MIC2000 mixing shaft is movable relative to the housing so that the mixing blade at its distal end is carried between an upper blade position remote from the cup support to a lower blade position adjacent to the cup support (Shake Shop Express videos; Branson Ex. 24; Williams Dep. physical inspection of MIC2000)
the blade configured to, when it is lowered into a cup containing frozen substance, shave the frozen substance, mix the frozen substance with liquid dispensed by the liquid dispenser, and incorporate air into the formed mixture of frozen substance and liquid.	The Hamilton Beach MIC2000 mixing blade is configured to, when it is lowered into the Hershey cup with its frozen milkshake, shave the frozen milkshake (with its sharp depressed edges), mix the frozen milkshake with water dispensed from the water dispenser, and incorporate air (with its curved, wave-like surfaces) into the formed slurry of frozen milkshake and water ((Shake Shop Express videos; HBBF29, “Water Scale”; Branson Ex. 24; HBBF322, HBBF441; Williams Dep.; physical inspection of MIC2000)

114. While it is my opinion that claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent are being literally infringed, I also believe that each element of claims 1-4, 6, 9, 11-14, 18-22, 25 and 27 of the ‘377 patent is being infringed under the doctrine of equivalents because each claim element has substantially the same function, is performed in substantially the same way

and achieves substantially the same result as the corresponding elements of the MIC2000 blender.

VII. Copying and Lack Of Suitable Alternative Non-Infringing Substitutes

115. The documents I have reviewed show that, from the very beginning of their design efforts for the MIC2000, BIC2000, BIC3000-DQ and IMI2000 blenders, Hamilton Beach carefully studied f'real's patented blenders (see Williams, pp. 17-21; Branson, pp. 9-11; Williams, DX16-19). Over and over again, when it came time to making critical design decisions for the accused blenders, Hamilton Beach's engineers decided that the best solution was to copy f'real's inventions. Perhaps the most important decision Hamilton Beach's engineers made to copy f'real was to use f'real's patented approach to creating a self-rinsing blender. While Hamilton Beach has argued that f'real's self-rinsing blender patents are supposedly anticipated by the prior art Kelly patent, Hamilton Beach's engineers never considered adopting Kelly's approach to cleaning. The Kelly patent discloses placing a kitchen sink-style rinse nozzle next to a blender and manually using that rinse nozzle to clean the blender (see Williams DX33, FIG. 1 – rinse nozzle highlighted):



Hamilton Beach’s engineers testified at their depositions that their customers demanded an automated, self-rinsing machine of the type f’real patented, rather than one with manual cleaning like that shown in the Kelly patent (Williams Dep., pp. 115-118; Pryor Dep., p. 89; Branson Dep., pp. 24-28). As Mr. Pryor aptly put it, “the customer wants the milkshake, not to clean up after themselves” (Pryor Dep., p. 89). Hamilton Beach acknowledged the need for, and its intended use of, the patented f’real technology in its “HBB Business Case Summary” prepared for the IMI2000 project that was the basis for all the accused products, noting: “[t]he method by which the machine cleans itself between cycles became a challenge during the development phase. This is being solved with a licence agreement between a company called f’REAL (who have IP in this area that we intend using) and HBB. ... We believe having access to this IP is a competitive advantage and it will cause problems for our competitor (Manitowoc/Enodis)” (UNREDACTED “HBB Business Case Summary”, HBBF171458).

116. Yet, Hamilton Beach’s engineers went much further than simply copying f’real’s idea of a self-rinsing blender - Hamilton Beach’s engineers also copied the way f’real designed its self-rinsing blender. Hamilton Beach and Hershey studied the f’real blenders in the

marketplace and shared photographs of the internal components of the f̄real machines (see Waite DX18-19; Holder DX1-3). Like f̄real's commercial blenders and those shown in f̄real's self-rinsing blender patents, all of the accused Hamilton Beach blenders point one or more pre-positioned nozzles at the splash shield as claimed in f̄real's '662 patent. All the accused Hamilton Beach blenders also use the type of weighted, free-floating splash shield positioned around the blending spindle shaft that f̄real invented and patented.

117. As a first action item in Hamilton Beach's work with Hershey, Hamilton Beach and Hershey conducted tests to determine how much water f̄real added to its milkshakes during the blending process (Williams DX16, HBBF37084; Waite DX15). They determined that it "[a]ppears to be about 3 oz. of water added in order to get what we would consider a good shake consistency." *Id.* Based upon this information, Hamilton Beach designed the MIC2000 to also "automatically deliver 2-3 oz. of water to each cup before it is blended" (Williams DX8, HBBF13114; Waite DX17). Hamilton Beach not only copied f̄real's idea of adding liquid in the process of reconstituting a frozen milkshake as claimed in f̄real's '377 patent but they decided to use the exact same amount of water that f̄real used.

118. Although there are some differences in the overall appearances of the f̄real and Hamilton Beach blending blades, Hamilton Beach copied the functional attributes of the f̄real blending blades in designing the MIC2000 blending blade. To grind and shave through the frozen Hershey milkshake, Hamilton Beach copied f̄real's approach of using a blending blade with a "sharp depressed edge and a slim cross-sectional profile" (Williams DX40, HBBF441). While denying at their depositions that their blending blade aerates the Hershey milkshake during blending, Hamilton Beach again copied f̄real's approach of using a "curved, wave-like structure" with a slim cross-sectional profile on Hamilton Beach's MIC2000 blade. *Id.* Contrary

to the testimony of Hamilton Beach's engineers, scientific tests of Hamilton Beach's "boat propeller" upper blade shows that it does aerate the Hershey milkshakes as discussed above (see attached Exhibit "B").

119. In a February 25, 2011 e-mail to f'real, Hamilton Beach freely admitted that having access to f'real's technology "certainly gained value [for Hamilton Beach] by eliminating some time in development and building a level of certainty into our design that we might not have otherwise had" (Wood DX19, HBBF619). From the documents and deposition testimony I have reviewed, it is readily apparent that, given Hamilton Beach's and Hershey's objectives, Hamilton Beach's engineers concluded there were no suitable alternative non-infringing substitutes to copying f'real's patented technology. Further, no suitable alternative non-infringing substitutes have been brought to my attention.

VIII. f'Real's Use Of Its Patented Technology

120. I understand that f'real introduced its first self-rinsing blender, the FLRB2 ("B2"), in 2003. The B2 blender is pictured below:



121. As can be seen in the interior photograph, f'real's B2 blender has a weighted splash shield mounted concentrically on the B2 spindle above the mix blade. On the left side of the mix chamber are two rinse nozzles, one pointing upward toward the underside of the splash shield and the other pointed downward toward the spindle and top of the splash shield. These two rinse nozzles are used for rinsing the mix chamber in the f'real B2 blender. Further information about the B2 blender can be found in the "Installation and Operation Guide for f'real FRLB2 blender."

122. I have been told that f'real introduced an upgrade to the B2 blender in about 2010 which it designated as the FLRB4 ("B4") blender. Some of the most notable improvements in the B4 blender was the capability to automatically steam sanitize the mix chamber as well as a colorful video display. f'real's B4 blender is pictured below:



123. Like the B2 blender, f'real's B4 blender has a weighted splash shield mounted concentrically on the B4 spindle above the mix blade. Instead of metal rinse nozzles, the B4 blender uses four plastic rinse nozzles. Some of the four B4 rinse nozzles are shown in the right B4 photograph above. As with the B2 blender, the B4 blender has one of its rinse nozzles

pointing upward toward the underside of the splash shield and another rinse nozzle pointed downward toward the spindle and top of the splash shield. Further information about f̄real's B4 blender can be found in the document entitled "In-Cup Blender With Chemical-free Automated Clean-in-Place System: Model FRLB4" (FREAL131216-131220)

124. f̄real introduced its FLRB6 ("B6") blender in about 2016. A significant improvement in the B6 blender is its modular construction. f̄real's B6 blender is pictured below:



125. Like the B2 and B4 blenders, f̄real's B6 blender has a weighted splash shield mounted concentrically on the B6 spindle above the mix blade. Like the B4 blender, the B6 blender uses four plastic rinse nozzles. Some of the four B6 rinse nozzles are shown in the right B6 photograph above. As with the B2 and B4 blenders, the B6 blender has one of its rinse nozzles pointing upward toward the underside of the splash shield and another rinse nozzle pointed downward toward the spindle and top of the splash shield. Further information about f̄real's B6 blender can be found in U.S. Published Patent Application No. 2018/0132663.

126. For the reasons explained in the following charts, I conclude that f'real's B2, B4 and B6 blenders and their standard method of use practice the inventions claimed in at least claim 21 of the '662 patent, claim 15 of the '150 patent and claim 1 of the '658 patent:

U.S. Patent No. 7,520,662	Comments
21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:	f'real's B2, B4 and B6 mixing machine blenders automatically perform a method for rinsing a splash shield after the f'real milkshake is blended and removed
providing a vessel containing material to be mixed, the vessel including an opening:	f'real's frozen cups used with f'real's B2, B4 and B6 blenders have frozen milkshake, smoothie or cappuccino inside and include a top opening
further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield:	f'real's B2, B4 and B6 blenders have a cup holder for receiving the f'real cup, a rotatable mixing blade extendable into the cup for mixing the frozen milkshake, smoothie or frozen cappuccino, a splash shield positionable to shield the top opening of the f'real cup, and pre-positioned rinse nozzles oriented to spray rinse water towards soiled surfaces of the splash shield
After mixing the material in the vessel using the mixing element and with the splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.	After f'real's B2, B4 and B6 blenders mix the frozen milkshake, smoothie or cappuccino in the f'real cup while the splash shield lid is shielding the cup opening, the f'real cup is lowered to allow the f'real cup to be removed. f'real's B2, B4 and B6 blenders then automatically direct rinsing fluid onto soiled surfaces of the splash shield using the prepositioned rinse nozzles. Since the f'real cup is removed from the f'real mixing chamber before the automatic rinsing, the f'real cup is isolated from the rinsing fluid during the rinsing step

U.S. Patent No. 7,520,658	Comments
1. A mixing machine for mixing a liquid in a vessel having an opening, the mixing machine comprising:	f'real's B2, B4 and B6 mixing machine blenders mix a liquid milkshake, smoothie or cappuccino contained in a cup (vessel) with a top opening
a holder coupled to the mixing machine, the holder proportioned to receive a vessel;	f'real's B2, B4 and B6 blenders each have a cup holder proportioned to receive the f'real cup
a rotatable mixing element extendable through the opening into the vessel positioned in the holder, for mixing the contents of the vessel;	f'real's B2, B4 and B6 blenders each have a rotatable blending/mixing blade that is extendable through the top opening of the cup positioned in the cup holder for mixing the drink contents contained in the cup
a motor operatively coupled to at least one of the holder and the mixing element to effect axial translation of the mixing element between first and second positions within the vessel, the mixing element positioned further from the opening when in the first position than when in the second position;	f'real's B2, B4 and B6 blenders each have a carriage motor operatively coupled to the cup holder to effect axial translation of the mixing blade from a first (in this case lower) mixing position to a second (in this case upper) mixing position, the mixing blade being positioned further from the cup opening when in the first (lower) mixing position than in the second (upper) mixing position
a shaft; and	f'real's B2, B4 and B6 blenders each have a mixing shaft between the mixing motor and mixing blade element
a splash shield slidable on the shaft between first and second positions, the splash shield in the second position positionable covering the opening of the vessel and being unrestrained against sliding movement on the shaft in a direction away from the opening, the splash shield having sufficient mass to retain the vessel within the holder during relative axial movement of the mixing element and vessel from the first position to the second position when liquid is present in the vessel.	f'real's B2, B4 and B6 blenders each have a splash shield slidable on the mixing shaft (through an aperture in the splash shield lid) between a first (in this case lower) splash shield position and a second (in this case higher) splash shield position, the splash shield in the second (higher) position positionable with its splash shield lid covering the cup opening and being unrestrained against a sliding movement on the mixing shaft in a direction away from the cup opening, the splash shield having sufficient mass (when its lid covers the cup opening) to retain the cup within the cup holder during relative axial movement of the mixing blade and the

U.S. Patent No. 7,520,658	Comments
	cup from the first (lower) shield position to the second (higher) shield position when liquid is present in the cup

U.S. Patent No. 7,144,150	Comments
15. On a mixing machine for mixing a liquid contained in a vessel having an opening,	f'real's B2, B4 and B6 blenders each mix milkshake, smoothie and cappuccino liquids in a cup (vessel) having an opening at its top
the mixing machine of a type including a rotatable mixing element extendable into the vessel for mixing the contents of the vessel, the improvement comprising:	f'real's B2, B4 and B6 blenders each have a rotatable mixing blade element extendable into the cup for mixing the contents of the cup
a rinse chamber in the mixing machine, the rinse chamber having an entrance and a door moveable to a closed position covering the entrance;	f'real's B2, B4 and B6 blenders each have a rinse chamber with an entrance and a trap door movable to a closed position covering the entrance
a splash shield carried by the mixing machine, the splash shield positionable covering the opening of the vessel, and	f'real's B2, B4 and B6 blenders each carry a splash shield which is positionable so that its splash shield lid covers the top opening of the cup
at least one nozzle coupled to a source of rinse fluid and oriented to direct fluid onto the splash shield within the rinse chamber	f'real's B2, B4 and B6 blenders each have multiple nozzles coupled, through a water hose opening at the back of the blender, to a source of rinse fluid. The nozzles are oriented to direct rinse fluid onto the splash shield within the rinse chamber

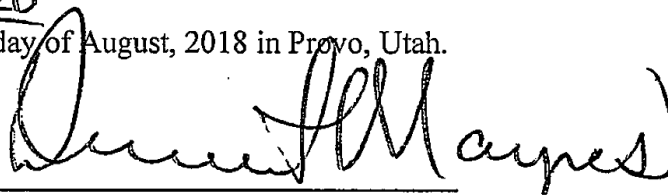
IX. Revision or Supplementation

127. I reserve the right to modify and/or supplement this report based on information that may subsequently become available in this matter.

X. Demonstrative Exhibits

128. If called to testify at trial, I may prepare demonstrative exhibits, such as PowerPoint presentations, charts and/or graphs, to further explain my opinions.

Executed on this 23rd day of August, 2018 in Provo, Utah.

A handwritten signature in black ink, appearing to read "Daniel Maynes", written over a horizontal line.

Daniel Maynes, Ph.D

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**PLAINTIFFS' OPPOSITION TO DEFENDANTS' MOTION IN
LIMINE NO. 3 TO PRECLUDE EVIDENCE FROM DR. MAYNES**

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April 2, 2019

Because Plaintiffs properly and timely disclosed their 2015 attorney work product aeration testing and Dr. Maynes's 2019 summary judgment response declaration, Defendants' Motion In Limine No. 3 to exclude Dr. Maynes's testimony should be denied. Defendants' complaints about the timing of these disclosures are a direct result of their own failure to timely disclose their non-infringement positions throughout this litigation. *See* PTO Ex. 15.

f'real's 2015 Attorney Work Product Aeration Testing. One of the infringement issues is whether the accused MIC2000 blender has the claimed "aeration means" of f'real's '377 patent. In 2015, Plaintiffs' counsel worked with f'real's engineers to design and implement confidential laboratory experiments to determine the extent to which the MIC2000 blades aerate Hershey's milkshakes. At the time these confidential experiments were done in 2015, they were attorney work product and, as such, did not need to be produced during fact discovery.¹ Fed. R. Civ. P. 26(b)(3). Nor did Defendants contend aeration was at issue in response to Plaintiffs' interrogatory requesting non-infringement contentions. *See* Ex. 1 (Hershey 7/12/18 Supp. Response to Interr. No. 5); *see also* PTO Ex. 15 at Ex. A.²

When Dr. Maynes was contacted by Plaintiffs' attorneys in June 2018 about preparation of his opening expert report on infringement, Dr. Maynes was asked to review the 2015 aeration experiment reports and determine whether they should be referenced in his report. After reviewing the aeration reports, Dr. Maynes determined that they should be referenced and, accordingly, they were attached as exhibits to Dr. Maynes' opening expert report and produced to Defendants (Def. Mtn. 3, Ex. A). Plaintiffs made a timely disclosure of these aeration

¹ *See Vardon Golf Co., Inc. v. BBMG Golf Ltd.*, 156 F.R.D. 641, 646-49 (N.D. Ill. 1994) (experiments requested by attorney during patent litigation protected from discovery by attorney work product doctrine).

² Plaintiffs properly objected to Defendants' discovery requests on work product grounds (to the extent such requests would cover the testing). Moreover, in response to Defendants' Interrogatory No. 10, Plaintiffs specifically referenced f'real's aeration experiments, but Defendants never requested those documents. *See* Defs. Mtn. Ex. D at 16.

experiment reports.³ On October 17, 2018, Defendants fully deposed Dr. Maynes about his expert reports, including the 2015 aeration reports (Def. Mtn. 3, Ex. B). Defendants did not request to take any further depositions concerning the 2015 aeration reports.

Dr. Maynes's 2019 Summary Judgment Response Declaration. As explained more fully in Plaintiffs' Motion in Limine No. 3 (PTO Ex. 15), Plaintiffs served interrogatories on Defendants in January 2015 requesting Defendants' non-infringement contentions (*id.* at Ex. A; Ex. 2). By the time Dr. Maynes's opening expert report on infringement was due in August 2018, Defendants had failed to disclose their non-infringement contentions in response to Plaintiffs' contention interrogatories (PTO Ex. 15 at Exs. A and B; Exs. 1 and 2). In preparing Dr. Maynes's opening report, Plaintiffs and Dr. Maynes were left to guess what Defendants' non-infringement defenses might be.

When Dr. Slocum submitted his rebuttal expert report in September 2018, and when Defendants filed their summary judgment brief in December 2018, they raised new non-infringement arguments that, for example, Dr. Maynes allegedly failed to prove that the MIC2000 blender performed the claimed "grinding"/"shaving" functions and that Dr. Maynes was allegedly professionally derelict for relying upon 2015 aeration experiments conducted by f'real. Defendants' failure-of-proof argument was particularly surprising because, in Hamilton Beach's '377 patent re-examination petition, Hamilton Beach took the position that one could assume (i.e., without having to prove) that the "grinding" and "shaving" functions were performed if the blending blade had a sharp depressed edge like the lower MIC2000 blade (*see*

³ *See Nycomed US Inc. v. Glenmark Generics Ltd.*, 2009 WL 10708942, *2 (E.D.N.Y. Aug. 4, 2009) (until used in expert report, product testing at request of attorney protected from discovery by attorney work product doctrine); *JDS Therap., LLC v. CVS Pharmacy, Inc.*, 2015 WL 6459092, *1 (S.D.N.Y. Oct. 22, 2015); *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1380 (Fed. Cir. 2005) (attorney work product was not at issue and exclusion was warranted where testing was produced just six weeks before trial).

Ex. 3, pp. 13-16).

In opposition to Defendants' summary judgment motion, Plaintiffs submitted a declaration from Dr. Maynes (D.I. 201) that responded both to Dr. Slocum's summary judgment declaration (D.I. 177) and the new non-infringement arguments set forth in Dr. Slocum's rebuttal expert report.⁴ Contrary to Defendants' allegations, the points made in Dr. Maynes's summary judgment response declaration are not "new." In response to Dr. Slocum's criticism that Dr. Maynes was not physically present during the 2015 aeration experiment, the exact same aeration experiment was re-performed in January 2019 with Dr. Maynes physically present and it produced the same result (*compare* Def. Mtn. 3, Ex. A *with* attachment to D.I. 201). Dr. Maynes also submitted visual evidence further corroborating the statements made in his opening report about infringement of the "grinding" and "shaving" claim elements (*compare* Def. Mtn. 3, Ex. E, pp. 67-80 *with* D.I. 201, pp.10-15). Defendants never asked to depose Dr. Maynes about his summary judgment response declaration.

Defendants contend that Dr. Slocum was allowed to submit a summary judgment declaration with new evidence (D.I. 177) but the response from Dr. Maynes should be excluded as untimely.⁵ Similarly, Defendants see no problem with hiding their infringement contentions during fact discovery but cry foul if f' real responds to new non-infringement arguments made after the close of fact discovery. Defendants cannot have it both ways. Plaintiffs are entitled to rebut new matters raised by Defendants, and have done so in a reasonable and timely manner.

⁴ Reply expert reports were not permitted by the Scheduling Order in this case. D.I. 168, ¶ 11(a).

⁵ Moreover, Defendants have not provided any analysis of the *Pennypack* factors or otherwise demonstrated undue prejudice which would require preclusion when weighed against the "importance of the excluded testimony." *Konstantopolous v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir. 1997), citing *Meyers v. Pennypack Woods Home Ownership Ass'n*, 559 F.2d 894, 904-905 (3d Cir. 1977).

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

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*Attorneys for Plaintiffs f^rreal Foods, LLC and
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April 2, 2019

Exhibit 1

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,	)	C.A. No. 16-41-GMS
	)	(consolidated)
v.)	
	)	JURY TRIAL DEMANDED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and	)	CONTAINS HIGHLY
PAUL MILLS d/b/a MILLS BROTHERS	)	CONFIDENTIAL INFORMATION
MARKETS,)	
)	
Defendants.)	

**DEFENDANT HERSHEY CREAMERY COMPANY'S FIRST SUPPLEMENTAL
ANSWERS TO PLAINTIFF'S INTERROGATORIES – FIRST SET**

Defendant Hershey Creamery Company ("Hershey Creamery"), by and through its undersigned counsel, serves the following supplemental objections and answers to Plaintiff f'real Foods, LLC's First Set of Interrogatories to Hershey Creamery.

GENERAL OBJECTIONS

Hershey Creamery expressly incorporates into each of the following supplemental answers all General Objections from Hershey Creamery's initial Answers to Plaintiff's Interrogatories – First Set, which were served on March 23, 2015, whether or not a supplemental answer refers to any General Objection.

ANSWERS AND SPECIFIC OBJECTIONS

4. Identify and fully describe, on a quarterly basis for each calendar quarter: the price(s) charged by Hershey Creamery for the Accused Product, the total number of units and date range(s) the Accused Product was made, used, offered for sale, or sold in the United States,

CONTAINS HIGHLY CONFIDENTIAL INFORMATION

imported into the United States, or made in the United States and exported, the total revenue, incremental profit, gross profit, operating profit, and net income for the Accused Product as reported by or for Hershey Creamery under GAAP standards, the method(s) used by Hershey Creamery to calculate those figures, the person(s) most knowledgeable about the information requested in this interrogatory, and documents sufficient to confirm the accuracy of the information provided by Hershey Creamery in response to this interrogatory.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Documents outlining the information requested in this Interrogatory will be produced once the Protective Order is entered in this case.

FIRST SUPPLEMENTAL ANSWER:

Hershey Creamery further objects to this Interrogatory as unduly burdensome to the extent it seeks information in a format other than as maintained in the ordinary course of business. Hershey Creamery further objects to this Interrogatory because the phrase “most knowledgeable” is vague, ambiguous, and overbroad.

Subject to and without waiving the foregoing general and specific objections, and pursuant to Federal Rule of Civil Procedure 33(d), Hershey Creamery further answers this Interrogatory by identifying the following documents from which the answer may be ascertained by f^r real at substantially the same burden as Hershey Creamery:

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HCC_017492-93, HCC_017598-613, HCC_017614-30, HCC_017631-42, HCC_017643-72, HCC_017673, HCC_017674-76, HCC_017677-79, HCC_017680-84, HCC_017685-90, HCC_017691-96, HCC_017697-705, HCC_017706-11, HCC_017712-19, HCC_017720-27, HCC_017728, HCC_017729, HCC_017730, HCC_017731, HCC_017732, HCC_017733, HCC_017734, HCC_017735, HCC_017736, HCC_017737, HCC_017738, HCC_017739-40, HCC_017741, HCC_017742, HCC_027158, HCC_027246, HCC_017494-520, HCC_017521-46, HCC_017547-72, HCC_017573-97

Hershey Creamery further answers this Interrogatory by identifying George Holder as the person who is reasonably expected to be meaningfully knowledgeable on the subject of this Interrogatory.

5. For any Patent-In-Suit that you contend is not infringed by use of an Accused Product, specify each claim element or limitation that is allegedly not met by the Accused Product, the factual bases for that contention, the three persons most knowledgeable about those facts. Your response may take the form of a claims chart.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Hershey Creamery objects that this interrogatory is overbroad and premature as Plaintiff has not yet served its infringement contentions identifying which claims of the Patents-In-Suit are being asserted. Hershey Creamery will supplement its response after Plaintiff provides its infringement contentions in accordance with the scheduling order in this case.

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FIRST SUPPLEMENTAL ANSWER:

Hershey Creamery further objects that this Interrogatory is overbroad and premature to the extent it calls for expert testimony or a legal opinion.

Subject to the foregoing general and specific objections, and based on Hershey Creamery's understanding of this Interrogatory, Hershey Creamery answers as follows: Based on observations of the Accused Product during normal operation and Hershey Creamery's understanding of the language of the asserted claims, the Accused Product does not infringe any asserted claim of the Patents-in-Suit because the Accused Product does not include each and every limitation of any one asserted claim of the Patents-in-Suit.

6. For any claim of any Patent-In-Suit that you contend is invalid, identify the specific statutory bases for invalidity (e.g., 35 U.S.C. § 102(a)), the factual bases for that contention, any allegedly invalidating prior art or publications, where each element of the claim is found in the prior art or publications, and the three people most knowledgeable about the factual bases for your contention. Your response may take the form of a claims chart.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Hershey Creamery further objects that this interrogatory is premature and that Hershey Creamery will provide invalidity contentions in accordance with the scheduling order in this case.

CONTAINS HIGHLY CONFIDENTIAL INFORMATION

FIRST SUPPLEMENTAL ANSWER:

Subject to and without waiving the foregoing general and specific objections, and pursuant to Federal Rule of Civil Procedure 33(d), Hershey Creamery further answers this Interrogatory by incorporating by reference Defendant Hamilton Beach Brands, Inc.'s Final Patent Invalidity Contentions, which were served on February 12, 2018, (see D.I. 98) and in which Hershey Creamery joined, (see D.I. 99).

11. State all facts and circumstances relating to retail purchases of the Accused Product including identification of all retail purchasers, the number of units purchased and the dollar volume.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Documents outlining the information requested in this Interrogatory will be produced once the Protective Order is entered in this case.

FIRST SUPPLEMENTAL ANSWER:

Hershey Creamery further objects to this Interrogatory as unduly burdensome to the extent it seeks information in a format other than as maintained in the ordinary course of business.

Subject to and without waiving the foregoing general and specific objections, and pursuant to Federal Rule of Civil Procedure 33(d),

CONTAINS HIGHLY CONFIDENTIAL INFORMATION

Hershey Creamery further answers this Interrogatory by identifying the following documents from which the answer may be ascertained by f'real at substantially the same burden as Hershey Creamery:

HCC_017673, HCC_027158, HCC_027247

POTTER ANDERSON & CORROON LLP

OF COUNSEL:

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Dated: July 12, 2018
5865385 / 41988 (16-41)

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*Attorneys for Defendants
Hershey Creamery Company and
Paul Mills d/b/a Mills Brothers Markets*

Exhibit 2

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC,)	
)	
Plaintiff,)	
	)	C.A. No. 14-1270-GMS
v.)	
	)	JURY TRIAL DEMANDED
HAMILTON BEACH BRANDS, INC.,)	
HERSHEY CREAMERY COMPANY and)	
PAUL MILLS d/b/a MILLS BROTHERS)	
MARKETS,)	
)	
Defendants.)	

**DEFENDANT HERSHEY CREAMERY COMPANY'S
ANSWERS TO PLAINTIFF'S INTERROGATORIES – FIRST SET**

Defendant Hershey Creamery Company ("Hershey Creamery"), by and through its undersigned attorneys, serves this Response to Plaintiff's Request for Production of Documents – First Set.

I. OBJECTIONS

1. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that they are overbroad, unduly and unreasonably burdensome and oppressive.
2. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that they are duplicative, unreasonably cumulative and oppressive.
3. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that they call for the identification or production of information that is protected from discovery by the attorney-client privilege, the work-product doctrine or any other applicable privilege or protection, including but not limited to the mental impression of counsel or Hershey Creamery's representatives as to the value or merits of his claim.

4. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that they seek confidential business information or proprietary and trade secret information.

5. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that the information sought is already known to or in possession of Plaintiff.

6. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that providing an answer to them in light of Plaintiff's definitions and instructions would cause unreasonable annoyance, harassment, oppression, undue burden and extreme expense.

7. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that said Interrogatories call for information regarding matters not relevant to the subject matters of this action and not reasonably calculated to lead to the discovery of admissible evidence.

8. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that they are so vague and ambiguous that they are not subject to reasonable interpretation, are argumentative or assert as fact allegations that are not at issue in this action.

9. Hershey Creamery objects to Plaintiff's Interrogatories to the extent that they call for legal conclusions.

The General Objections asserted above shall be deemed to be applicable to and continuing with respect to each of the Plaintiff's Interrogatories set forth below. The General Objections asserted above are incorporated into each and every one of Hershey Creamery's responses set forth herein. Such objections are not waived, nor in any manner limited, by any responses to any Interrogatory. Hershey Creamery reserves the right to amend, supplement, or alter their responses to Plaintiff's Interrogatories at any time.

II. RESPONSES

1. Describe any involvement you have had in working with co-Defendant Hamilton Beach Brands, Inc. to develop and market frozen milkshakes or smoothies for use with mixers or blender produced by Hamilton Beach Brands, Inc., including identify all persons at Hershey Creamery who have worked with Hamilton Beach Brands, Inc. and state the nature of their work with Hamilton Beach Brands, Inc.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

In or about October 2010, Hershey Creamery approached Hamilton Beach about Hamilton Beach providing a mixer for a line of self-service milk shakes and smoothies that Hershey Creamery was developing. Hershey Creamery worked with Hamilton Beach on the development of the mixer. Zachary Waite and George Holder were the primary people at Hershey Creamery who dealt with Hamilton Beach.

In or about May 2013, Hamilton Beach sold the first 30 units of the MIC2000 to Hershey Creamery. In or about January 2014, Hershey Creamery negotiated a Purchase and Distribution Agreement with Hamilton Beach for the sale of a minimum number of MIC2000 machines in exchange for a limited exclusivity period that expires in or about February 2015. Hershey Creamery has since purchased MIC2000 machines from Hamilton Beach pursuant to this agreement.

2. Identify all persons at Hershey Creamery whose responsibilities include research, development, design, testing, evaluation, manufacture, use, marketing, commercialization, promotion, sales, offers for sale, importation, exportation, distribution, and financial reporting with respect to the Accused Product, describing the pertinent knowledge of each such person and their position or other association with Hershey Creamery.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

NAME	TITLE	SUBJECTS
Zachary Waite	Executive Brand Manager	All aspects of the Shake Shop Express project
George Holder	President	All aspects of the Shake Shop Express project
Chuck Preston	Marketing/Creative Director	Design and marketing of the Shake Shop Express
Tom Holder	Vice President of Sales	Sales of the Shake Shop Express
Steve Hoffer	Cabinet Shop Assistant	Orders machinery in connection with the Shake Shop Express
Zach Engle	Assistant Project Manager	Installation and repair of Shake Shop Express equipment

3. Identify the names and positions of the persons likely to have documents or other information with respect to the Accused Product, the Patents-in-Suit or Related Applications.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response.

NAME	POSITION
Zachary Waite	Executive Brand Manager
George Holder	President
Chuck Preston	Marketing/Creative Director
Tom Holder	Vice President of Sales
Steve Hoffer	Cabinet Shop Assistant
Zach Engle	Assistant Project Manager
Bob Butler	National Accounts Manager
Kevin Gold	Outside Counsel
Tom Hooker	Outside Counsel
Tom Nehilla	Outside Counsel
Ann Marie Blackmon	Key Account Manager
Ben Branson	Manager, Project Engineering
Brian Williams	Group Manager, Project Engineering
Hank Wood	Vice President, Global Commercial
Alex Raring	IP Counsel
Dana Sykes	Assistant General Counsel
Brian O'Flynn	Project Manager
Trevor Downs	Quality Control
Seth Monang	Customer Support and Service
Phil Keeney	Plant Manager
Bruce Gingerick	Sales Representative
Domenic Ciullo	Business Development Manager

4. Identify and fully describe, on a quarterly basis for each calendar quarter: the price(s) charged by Hershey Creamery for the Accused Product, the total number of units and date range(s) the Accused Product was made, used, offered for sale, or sold in the United States, imported into the United States, or made in the United States and exported, the total revenue, incremental profit, gross profit, operating profit, and net income for the Accused Product as reported by or for Hershey Creamery under GAAP standards, the method(s) used by Hershey Creamery to calculate those figures, the person(s) most knowledgeable about the information requested in this interrogatory, and documents sufficient to confirm the accuracy of the information provided by Hershey Creamery in response to this interrogatory.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Documents outlining the information requested in this Interrogatory will be produced once the Protective Order is entered in this case.

5. For any Patent-In-Suit that you contend is not infringed by use of an Accused Product, specify each claim element or limitation that is allegedly not met by the Accused Product, the factual bases for that contention, the three persons most knowledgeable about those facts. Your response may take the form of a claims chart.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Hershey Creamery objects that this interrogatory is overbroad and premature as Plaintiff has not yet served its infringement contentions identifying which claims of the Patents-In-Suit are being asserted. Hershey Creamery will supplement its response after Plaintiff provides its infringement contentions in accordance with the scheduling order in this case.

6. For any claim of any Patent-In-Suit that you contend is invalid, identify the specific statutory bases for invalidity (e.g., 35 U.S.C. § 102(a)), the factual bases for that contention, any allegedly invalidating prior art or publications, where each element of the claim is found in the prior art or publications, and the three people most knowledgeable about the factual bases for your contention. Your response may take the form of a claims chart.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Hershey Creamery further objects that this interrogatory is premature and that Hershey Creamery will provide invalidity contentions in accordance with the scheduling order in this case.

7. Identify the names and positions of all persons that rendered opinions regarding the validity, enforceability, or Hershey Creamery's infringement of the Patents-In-Suit, and state whether, and if so why, Hershey Creamery contends it reasonably relied upon any opinions of counsel.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Thomas Hooker, Esquire, Hooker & Habib, P.C. rendered opinions regarding the Patents-in-Suit.

8. State in detail the circumstances in which Hershey Creamery first learned of the existence of each of the Patents-In-Suit, or any Related Applications, including without limitation the date on which such information was first obtained, the source of such information, any efforts made to secure such information, and the substance of all such information obtained.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Hershey Creamery first learned of the existence of the Patents-in-Suit when Attorney Hooker performed his patent search in connection with his rendering of an opinion as to non-infringement.

9. State all facts and circumstances relating to the design of the “Shake Shop Express” kiosks and the use of the word “REAL” in the “Shake Shop Express” kiosk displays, including when such kiosks were developed, identification of persons with such knowledge or involvement and a description of their knowledge or involvement.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Hershey Creamery was founded on simple principles – making quality, premium, real ice cream and providing top notch service. Hershey Creamery has touted for years that its ice cream uses real chocolate, real nuts and is real good. From its top novelty lines, pints, scrounds, bulk and other ice cream products, Hershey Creamery uses the best ingredients available.

When developing the self-serve shake program, Hershey Creamery searched for a name and a brand identity. At the time a brand of ice cream parlors that Hershey Creamery was launching under the name “Shake Shop” were selling hand spun milkshakes to Hershey Creamery’s customers at a rapid pace. These shakes in the parlors were using Hershey Creamery’s premium and super premium real ice cream bulk flavors from the 3 gallon cans. These shakes were such a success that Hershey Creamery decided to take both the formula for its ice cream and the namesake it was developing and shift it over to the self-serve program. That is how the name Shake Shop Express was developed.

Developing the look of the surround, product and support materials for the kiosks was done in-house using the Hershey Creamery marketing team. Research was done in stores around the territory to take advantage of a small footprint while striving to stand out among other drink offerings. The graphics mimic the Shake Shop parlors and the colors are in line with the Hershey's Ice Cream branding from other products, marketing materials, and Hershey Creamery's digital presence.

Hershey Creamery's trademarked slogan is "Real Ingredients. Real Ice Cream. Real Smiles".

10. State all facts and circumstances relating to any knowledge or involvement by anyone at Hamilton Beach in "Shake Shop Express" kiosks, including identification of persons with such knowledge or involvement and a description of their knowledge or involvement.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

No one at Hamilton Beach was involved with the design of the Shake Shop Express kiosks.

11. State all facts and circumstances relating to retail purchases of the Accused Product including identification of all retail purchasers, the number of units purchased and the dollar volume.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

Documents outlining the information requested in this Interrogatory will be produced once the Protective Order is entered in this case.

12. Describe all instances where f'real or its products have been discussed with a retailer or "Shake Shop Express" customer including, but not limited to, every communication, inquiry, piece of misdirected correspondence or confusion by someone or some organization as to whether there is a was a relationship between you, your retailer, "Shake Shop Express" or an Accused Product and f'real or some product of f'real.

ANSWER:

Hershey Creamery objects to this interrogatory to the extent that it seeks information protected from discovery by the attorney client privilege, the work-product doctrine, common-interest privilege, and/or any other privilege or exemption from discovery. Hershey Creamery objects to this interrogatory to the extent that it seeks to impose burdens or obligations beyond the requirements of the Federal Rules of Civil Procedure and the applicable rules and orders of this Court. Hershey Creamery objects that this interrogatory is overbroad and unduly burdensome. Without waiving the foregoing objections, Hershey Creamery provides the following response:

It is impossible to describe with any particularity when, or even if, there have been any discussions of f'real of its products with retailers or Shake Shop Express customers. To the best of Hershey

Creamery's knowledge, there have been no communications, piece of misdirected correspondence or confusion by someone or some organization as to whether there is a relationship between Hershey Creamery, a Hershey Creamery Retailer, Shake Shop Express or an Accused Product and f'real or some product of f'real.

POTTER ANDERSON & CORROON LLP

OF COUNSEL:

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Dated: March 23, 2015
1184644 / 41988

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CERTIFICATE OF SERVICE

I, Bindu A. Palapura, hereby certify that on March 23, 2015, true and correct copies of the within document were served on the following counsel of record at the addresses and in the manner indicated:

VIA ELECTRONIC MAIL

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/s/ Bindu A. Palapura
Bindu A. Palapura

VERIFICATION

Zachary Waite deposes and says, under penalty of perjury under the laws of the United States of America, that the facts set forth in the foregoing document are true and correct to the best of his knowledge, information and belief.

VERIFICATION

Zachary Waite deposes and says, under penalty of perjury under the laws of the United States of America, that the facts set forth in the foregoing document are true and correct to the best of his knowledge, information and belief.

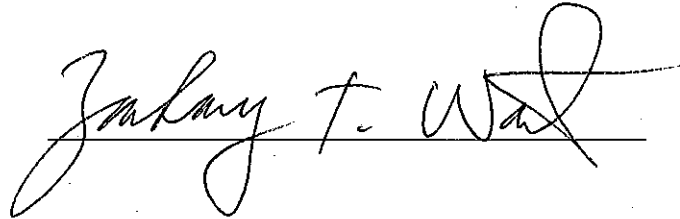
A handwritten signature in black ink, reading "Zachary T. Waite", is written over a horizontal line. The signature is cursive and stylized, with a large loop at the end of the last name.

Exhibit 3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: Reexamination of U.S. Patent No. 5,803,377

Inventor: James J. Farrell

Issued: September 8, 1998

Filed: February 5, 1997

Control No.: Unassigned

Title: APPARATUS AND METHOD FOR MAKING FROZEN DRINKS

Assignee: fReal Foods, LLC

REQUEST FOR *EX PARTE* REEXAMINATION OF U.S. PATENT NO. 5,803,377
UNDER 35 U.S.C. §§ 302-307 AND 37 C.F.R. § 1.510

Mail Stop Box: *Ex Parte* Reexam

Attn: Central Reexamination Unit (CRU)

Commissioner for Patents

United States Patent & Trademark Office

Randolph Building

401 Dulany Street

Alexandria, VA 22314

whereby the structure is “elevated edge of a rotatable blade which acts as an inverted ramped surface” and the function is “directing liquid from above the upper surface of the blade assembly to below the blade assembly.” Appendix C at 15.

Although neither the Applicant nor the Examiner provided any specific discussion on the scope of the term “means for . . . directing liquid from above the upper surface of the blade assembly to below the blade assembly,” the Examiner and the Applicant appeared to agree that blades 44 in *Tomlinson* direct liquid from above the upper surface of the blade downward to prevent the liquid from splashing out of the top. 2/2 Response at 12. Blades 44 of *Tomlinson* are described as having a suitable pitch or twist to force liquid down when it is rotated. *Tomlinson*, col. 5, ll. 13-18. The pitch or twist provides the blades with an elevated trailing edge. Because the Examiner and the Applicant only mentioned that the aeration means was not disclosed in *Tomlinson*, it appears that both the Examiner and the Applicant agreed that the “means for . . . directing liquid from above the upper surface of the blade assembly to below the blade assembly” was also disclosed by *Tomlinson*.

V. **STATEMENT UNDER 37 C.F.R. § 1.510(B)(1) OF EACH SUBSTANTIAL NEW QUESTION OF PATENTABILITY**

The prior art submitted by the Requestor in this request raises substantial new questions of patentability with regard to claims 1-27 of the '377 Patent.

A. **Substantial New Questions of Patentability Raised by the Combination of *Oberg* and *Stiffler***

Substantial new questions of patentability are raised by *Oberg* in combination with *Stiffler*. Neither *Oberg* nor *Stiffler* were considered by the Office during the prosecution of the '377 Patent.

Oberg discloses a vending machine for an ice cream drink, such as a milkshake. *Oberg*, col. 1, ll. 8-11) In *Oberg*, a solid cylinder of ice cream is sliced and allowed to fall through an

PATENT REEXAMINATION OF
U.S. PATENT NO. 5,803,377

opening into a cup prior to any additional liquid addition or mixing steps. *Oberg*, col. 4, ll. 38-44 and 65-70. *Oberg*'s vending machine includes a cabinet or housing 10 (*Oberg*, Fig. 1; col. 2, ll. 48-50); a carriage 22 mounted for lateral sliding movements within the cabinet 10 by means of rails 60 and roller supports 62 that provides a suitable cup receptacle 64 (*Oberg*, Figs. 2-3; col. 3, ll. 36-45); a station 16 where milk is dispensed in measured quantity through hose outlet 168 into the cup (*Oberg*, Fig. 1; col. 5, ll. 11-14 and 26-28), which satisfy each of the limitations of independent claims 1, 11, and 27 related to the housing, cup support, and liquid dispenser. The vending machine further includes mixer blades 216 that agitate and disperse the ice cream, milk and flavoring ingredients to produce a completed milk shake. *Oberg*, Fig. 2; col. 5, l. 74 – col. 6, l. 5. *Oberg* does not provide specific structural details regarding mixer blades 216.

Stiffler, however, discloses a mixing device including a dispersal knife 10 and a dispersal wheel 40. *Stiffler*, Figs. 1 and 2; col. 1, ll. 49-50 and col. 2, ll. 69-70. Dispersal knife 10 includes elements that grind and shave a frozen substance by scraping off and cutting into the frozen substance when being rotated at speeds typical for blending ice cream shakes. Appendix X at ¶ 37 (citing *Stiffler*, col. 3, ll. 64-67). Based on their proximity to the frozen substance, triangles 23 projecting toward the frozen substance would be expected to accomplish the grinding and shaving effects when being rotated at speeds typical for blending ice cream shakes. Appendix X at ¶ 39. Elements on dispersal knife 10 that scrape off and cut into the frozen substance read on the “grinding means,” “shaving elements,” and “grating elements” as those terms are used in the claims of the '377 Patent. For example, *Stiffler*'s dispersal knife 10 includes portions that are outside the plane of the rest of the blade, including, for example depressed regions.

Dispersal wheel 40 includes elements that aerate the mixture of frozen substance and liquid. Appendix X at ¶ 20 (citing *Stiffler*, col. 4, ll. 6-10). Elements on dispersal wheel 40 that

aerate the mixture of frozen substance and liquid read on the “aeration means” and “aeration elements” as those terms are used in the claims of the ’377 Patent. For example, dispersal wheel 40 includes leading edge portions 43 turned out of the plane of dispersal wheel 40. Appendix X at ¶ 21.

In addition to aerating, *Stiffler*’s dispersal wheel 40 includes elements that read on the “grinding means,” “shaving elements,” and “grating elements” as those terms are used in the claims of the ’377 Patent. After reviewing the disclosure of *Stiffler*, Dr. Bruce Tharp, who has had a lifetime of involvement in the dairy industry and ice cream industry in particular (Appendix X at ¶¶ 2-12), concluded that dispersal wheel 40 including leading edge portions 43 read on the claimed grinding/shaving means. Appendix X at ¶ 25. When the structure described and illustrated in *Stiffler* is rotated against a frozen substance, such as ice cream, leading edge portions 43 would cut into the surface of the frozen substance and remove small portions. Appendix X at ¶ 22. Such removal of small portions upon cutting into the surface of the frozen substance is consistent with both the Merriam-Webster dictionary definition of “grind”, *i.e.*, “to crush or break (something) into very small pieces by rubbing it against a rough surface,” and the description of the functionality of the “grinding means” in the ’377 Patent. Appendix X at ¶ 23. The rate of the removal of small portions is related to the speed of the wheel, as the faster the speed, the faster the material will be removed. Appendix X at ¶ 24. While the specific rotation speed of *Stiffler*’s dispersal wheel 40 is not given, it is referred to as “high motor speed transmitted to the wheels.” *Stiffler*, col. 3, l. 69. Since rotation characterized as “high speed” generally connotes the application of a high degree of mechanical shear, one of ordinary skill in the art would have understood that the rotation speed in this case is high enough to accomplish the grinding described above. Appendix X at ¶ 24. Dr. Tharp compared leading edge portions 43 of *Stiffler*’s dispersal wheel 40 to depressed trailing edge 130 of the ’377 Patent’s blade 76,

PATENT REEXAMINATION OF
U.S. PATENT NO. 5,803,377

which is described in the specification as the element that grates the surface of the frozen substance. Appendix X at ¶ 25. Dr. Tharp observed from the descriptions and drawings in the two patents that the elevation of leading edge portions 43 beyond the plane of *Stiffler's* dispersal wheel 40 is greater than that of the elevation of the depressed trailing edges 130 beyond the plane of the '377 Patent's blade. *Id.* Because of this greater elevation, one of ordinary skill in the art would have understood that the grinding effect of *Stiffler's* dispersal wheel would have been greater than the grinding effect of the '377 Patent's blade 76, if each was used under similar conditions. *Id.* In addition to performing the same function, the plurality of leading edge portions 43 extend outside the plane of dispersal wheel 40, and thus, read on the claimed "grinding means," "shaving elements," and "grating elements." Accordingly, Dr. Tharp concluded that dispersal wheel 40 of *Stiffler* also includes a "grinding means," "shaving elements," and "grating elements" as those terms are interchangeably used and claimed in the '377 Patent. Appendix X at ¶¶ 26-28.

In addition to grinding, shaving, and grating, dispersal knife 10 further includes elements that read on the "aeration means" and "aeration elements" as those terms are interchangeably used in the claims of the '377 Patent. Due to their projection from the plane of dispersal knife 10, triangles 28 projecting the opposite direction to the frozen substance, in combination with triangles 23 projecting toward the frozen substance, would help accomplish dispersal of the ground/shaved frozen substance into the liquid and create mechanical shear forces in the resulting mixture when rotated at high speed. Appendix X at ¶ 40. Those shear forces will increase as the rotation speed of the wheel increases, thereby causing air to be incorporated into the mixture of frozen substance and liquid. Appendix X at ¶ 41. Accordingly, at the high rotation speeds disclosed by *Stiffler*, one of ordinary skill in the art would have understood that

PATENT REEXAMINATION OF
U.S. PATENT NO. 5,803,377

air incorporation, and thus an aeration effect, would be accomplished by dispersal knife 10 as well. *Id.*

Specifically, the turbulence provided by the shear forces generated by the upward and downward projection of the leading and trailing edge portions 43, 44 would create alternately high and low pressure zones in the mixture of frozen substance and liquid when rotating therein. Appendix X at ¶ 42. The high and low pressure zones created therein would create turbulent eddies which cause a whipping effect by incorporating air in the manner described above when being rotated at speeds typical for blending ice cream shakes. *Id.* Dr. Tharp notes that triangles 23, 28 of *Stiffler's* dispersal knife would achieve this same aeration effect. Dr. Tharp compared triangles 23, 28 to the depressed and elevated trailing edges 130, 132 and waves 122 of the '377 Patent's blade 76, which are described as the elements that incorporate air into the mixture of frozen substance and liquid. Appendix X at ¶ 43. It appears from the descriptions and drawings in the two patents that the elevation of triangles 23, 28 beyond the plane of the *Stiffler's* dispersal knife is also greater than that of the elevation of the depressed and elevated trailing edges 130, 132 or waves 122 beyond the plane of the '377 Patent's blade 76. *Id.* Because of this greater elevation, one of ordinary skill in the art would have understood that the aeration effect of *Stiffler's* dispersal knife 10 would have been greater than the aeration effect of the '377 Patent's blade 76, if each was used under similar conditions, such as being rotated at speeds typical for blending ice cream shakes. *Id.* In addition to performing the aeration function, triangles 23, 28 of *Stiffler's* dispersal knife 10 extend outside the plane of the rest of the blade, and thus reads on the structure described in the '377 Patent for the "aeration means" and "aeration elements." Accordingly, Dr. Tharp submits that one of ordinary skill in the art would recognize that *Stiffler's* dispersal knife 10 includes "aeration means" and "aeration elements" as those terms are claimed in the '377 Patent. *See*, Appendix X at ¶¶ 44-46.

At the time the application resulting in the '377 Patent was filed, a person of ordinary skill in the art would have been motivated to utilize a blade assembly in mixing frozen substances with liquid that would not only break up and mix the frozen substance with the liquid, but also to create aeration or a whipping effect in the mixture to enhance the tactile (*i.e.*, “mouthfeel”) and flavor aspects of the mixture. Appendix X at ¶ 15. Because of this motivation, it would have been obvious to one of ordinary skill in the art to substitute the entire blade assembly including both dispersal knife 10 and dispersal wheel 40 or either just dispersal knife 10 alone or dispersal wheel 40 alone of *Stiffler* for mixer blades 216 of *Oberg*.

B. Substantial New Questions of Patentability Raised by the Combination of *Tomlinson* and *Stiffler*

Substantial new questions of patentability are raised also by *Tomlinson* in combination with *Stiffler*. Although *Tomlinson* was considered by the Office during the prosecution of the '377 Patent, *Stiffler* was not so considered and it cures any purported deficiencies that prompted the Examiner to withdraw the grounds of rejection based on *Tomlinson* during the prosecution of the '377 Patent.

As noted above, *Tomlinson* discloses an apparatus for mixing ingredients in a receptacle, such as hard ice cream in a milk shake. *Tomlinson*, col. 1, ll. 45-47. *Tomlinson's* apparatus includes a support or housing 10 (*Tomlinson*, Fig. 1; col. 2, l. 53); a platform 12 for supporting a receptacle in the form of a cup or container 14 (*Tomlinson*, Fig. 1; col. 2, l. 53-55); a milk source 5 shown in Fig. 1, a suitable conduit 145, which is controlled by a milk supply valve arrangement indicated generally at 6 and shown most clearly in Fig. 3 (*Tomlinson*, Figs. 1 and 3; col. 10, ll. 30-36), which satisfy each of the limitations of independent claims 1, 11, and 27 related to the housing, cup support, and liquid dispenser. As acknowledged by Applicant during prosecution of the '377 Patent, *Tomlinson* discloses a mixing blade assembly that shaves the

PATENT REEXAMINATION OF
U.S. PATENT NO. 5,803,377

Appendix P. 37 C.F.R. § 1.510(b)(2). A reasonable examiner would consider these teachings important in determining whether the claim is patentable.

For at least these reasons, a substantial new question of patentability is raised by this Request. Accordingly, claim 23 of the '377 Patent should be reexamined, rejected under 35 U.S.C. § 103(a), and cancelled pursuant to this Request.

CONCLUSION

Reexamination of the '377 Patent is proper because the combinations of the prior art references identified herein were not of record in and include key technical disclosure that was not considered during the prosecution of the '377 Patent, and are closer to the claimed subject matter than any of the prior art documents considered during the prosecution of the '377 Patent. Because the cited references would have been considered important by a reasonable examiner in deciding whether the claims are patentable, reexamination is proper and respectfully requested.

If there are any matter that may be cleared up in a telephone conversation please contact the Requester at (202) 230-5650.

Respectfully submitted

DRINKER BIDDLE & REATH LLP

Date: **October 28, 2016**

/William S. Foster, Jr./
William S. Foster, Jr.
Reg. No. 51,695
Christopher P. Bruenjes
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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	
)	
)	

**DEFENDANTS' REPLY IN SUPPORT OF
DEFENDANTS' MOTION *IN LIMINE* NO. 3**

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Dated: April 8, 2019

Counsel for Defendants

Plaintiffs' goal is to create a false equivalence regarding the actions of both parties during discovery. Defendants have timely disclosed the arguments they intend to present at trial. *See* Defs' Opp. to MIL No. 2. By contrast, Plaintiffs have failed to timely disclose the testing that Dr. Maynes and Plaintiffs rely upon to prove infringement. Plaintiffs cannot blame Defendants for their own failure to carry their burden of proof on infringement.

a. January 2019 Testing: Plaintiffs fail to cite any case law supporting admissibility of the tests and fail to distinguish the law cited by Defendants (D.I. 216 at 1-3). Thus, Defendants have met their burden of showing that the 2019 testing should be excluded.

b. 2015 Testing: Plaintiffs attempt to justify their failure to timely produce the 2015 internal f'real testing by invoking the work product doctrine. "A mere allegation that the work product doctrine is applicable is insufficient," and the burden is on Plaintiffs to demonstrate that the work product doctrine applies. *Novartis Pharms. Corp. v. Abbott Labs.*, 203 F.R.D. 159, 163 (D. Del. 2001). The 2015 testing fails to show that it was performed at the direction of counsel. *See* Ex. A. Further, Plaintiffs' counsel did not assert any privilege when Mr. Voges was asked about the testing at his deposition. Ex. F 44:13-46:14.¹ Even if the testing is work product, Plaintiffs cannot withhold it until after fact discovery has ended.² This would be an impermissible "sword and shield" use of privileged materials. *See In re EchoStar Commc'ns Corp.*, 448 F.3d 1294, 1303 (Fed. Cir. 2006).

Defendants have been highly prejudiced by Plaintiffs' failure to timely produce both sets of testing as it denied Defendants a full and fair opportunity for sufficient discovery of either sets of testing consistent with the Court's scheduling order. The testing should be excluded.

¹ Because the actual testing reports were withheld by Plaintiffs, Defendants did not have an opportunity to ask specific questions regarding the testing.

² None of the cases cited by Plaintiffs hold that a party that withholds such testing until expert discovery can rely upon it at trial. At best, they hold that a party can claim privilege over testing upon which it does not rely. The cases are also unclear as to whether the testing discussed is testing performed internally or testing that was performed by an expert.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

F'REAL FOODS, LLC and RICH PRODUCTS
CORPORATION,

Plaintiffs,

v.

HAMILTON BEACH BRANDS, INC. and HERSHEY
CREAMERY COMPANY

Defendants.

C.A. No. 16-41-CFC

CONSOLIDATED

**DECLARATION OF FRANCIS DIGIOVANNI IN SUPPORT OF
DEFENDANTS' REPLY IN SUPPORT OF MOTION *IN LIMINE* NO. 3**

¶

I, Francis DiGiovanni, declare:

1. I am a licensed attorney with the law firm of Drinker Biddle & Reath LLP, counsel for defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively "Defendants") in the above-captioned action. I am admitted to practice in this District, I am over 18 years of age, and have personal knowledge of the matters stated in this declaration and would testify truthfully to them if called upon to do so. I submit this declaration in support of Defendants' Reply in Support of Motion *in Limine* No. 3, filed contemporaneously herewith.

2. Attached hereto as Exhibit F is a true and correct copy of excerpts of the deposition transcript of Jens Voges, taken in this action.

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed this 8th day of April, 2019, in Wilmington, Delaware.

/s/ Francis DiGiovanni

Francis DiGiovanni, Esq.

francis.digiovanni@dbb.com

DRINKER BIDDLE & REATH LLP

EXHIBIT F

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC, and RICH)
PRODUCTS CORPORATION,)
Plaintiffs,)
vs.) Case No.
HAMILTON BEACH BRANDS, INC.,) 16-41-GMS
HERSHEY CREAMERY COMPANY and)
PAUL MILLS d/b/a MILLS)
BROTHERS MARKETS,)
Defendants.)
-----)

HIGHLY CONFIDENTIAL
VIDEOTAPED DEPOSITION OF JENS VOGES
San Francisco, California
Wednesday, June 13, 2018
Volume I

Veritext Legal Solutions
Mid-Atlantic Region
1250 Eye Street NW - Suite 350
Washington, D.C. 20005

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC, and RICH)
PRODUCTS CORPORATION,)
)
Plaintiffs,)
)
vs.) Case No.
) 16-41-GMS
HAMILTON BEACH BRANDS, INC.,)
HERSHEY CREAMERY COMPANY and)
PAUL MILLS d/b/a MILLS)
BROTHERS MARKETS,)
)
Defendants.)
-----)

VIDEOTAPED DEPOSITION OF JENS VOGES,
Volume I, taken on behalf of Defendant Hamilton
Beach Brands, Inc., at One Embarcadero Center,
San Francisco, California, beginning at 9:47 a.m.,
and ending at 4:20 p.m., on Wednesday, June 13,
2018, before CARLA SOARES, Certified Shorthand
Reporter No. 5908.

1 APPEARANCES:

2
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10 717.231.6625

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12
13
14 ALSO PRESENT: Cyril Suszckiewicz, Video Operator

15
16 --o0o--

1 a Hamilton Beach machine before the case was filed
2 in 2014?

3 A I did inspect a blender.

4 Q You said "a blender." What do you mean by
5 "a blender"?

6 A You asked if I personally inspected a
7 MIC2000, so I'm referring to the MIC2000.

8 Q Okay. Thank you.

9 And then after the case started, did you
10 inspect a MIC2000 that Hamilton Beach provided
11 F'real?

12 A Yes.

13 Q And with respect to the MIC2000 that
14 Hamilton Beach provided F'real, did you ever
15 perform -- and "you" being personally -- ever
16 perform any testing with respect to aeration?

17 A Can you repeat the question?

18 (Record read as follows:

19 "Question: And with respect to the
20 MIC2000 that Hamilton Beach provided F'real,
21 did you ever perform -- and "you" being
22 personally -- ever perform any testing with
23 respect to aeration?")

24 THE WITNESS: I did some basic testing,
25 but we did, then, also have more professional

1 testing done.

2 So I did it kind of using just a quick
3 experiment.

4 BY MR. FOSTER:

5 Q What was that experiment?

6 A As I recall it, both a combination of -- I
7 think primarily taking a Hershey product, letting it
8 melt, and then re-freezing it so it would start
9 without any overrun or very little overrun, and then
10 placing it into the MIC2000 and confirming that it
11 was, in fact, aerating.

12 Q How did you confirm it was aerating?

13 A Just a very basic inspection that the
14 volume had increased.

15 Q Is it your testimony that you also
16 performed a visual inspection of the MIC2000?

17 A I did look at it.

18 Q And do you remember -- do you remember
19 that part of that visual inspection -- if there was
20 a structure that covered the cup during the mixing
21 operation?

22 A During blending, yes, the cover -- I do
23 recall the cup being covered.

24 Q Do you remember if that cup cover included
25 a weight, a separate weight?

1 MR. CHAMBERS: Objection. Compound,
2 vague.

3 THE WITNESS: Yes, the cup cover was --
4 had an integrated weight.

5 BY MR. FOSTER:

6 Q What do you mean by "integrated"?

7 A So when -- like, the cup cover had a
8 weight attached to it.

9 Q And how was that weight attached to the
10 cup cover?

11 A I can't recall exactly, but it was -- it
12 was permanent. It was fixed.

13 Q It was fixed? It was removable by screws?

14 A I don't recall.

15 Q And you see here there's a bullet point
16 about vending?

17 A Yes.

18 Q What did you mean by "What does Walmart
19 want?"

20 MR. CHAMBERS: Objection. May call for
21 speculation.

22 THE WITNESS: I don't recall exactly what
23 I meant at that point.

24 BY MR. FOSTER:

25 Q Did F'real offer Walmart a vending option

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby
3 certify:

4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were administered an oath; that
8 a record of the proceedings was made by me using
9 machine shorthand which was thereafter transcribed
10 under my direction; that the foregoing transcript is
11 a true record of the testimony given.

12 Further, that if the foregoing pertains to
13 the original transcript of a deposition in a Federal
14 Case, before completion of the proceedings, review
15 of the transcript [] was [x] was not requested.

16 I further certify I am neither financially
17 interested in the action nor a relative or employee
18 of any attorney or any party to this action.

19 IN WITNESS WHEREOF, I have this date
20 subscribed my name.

21
22 Dated: _____

23
24 Carla Soares

25 CARLA SOARES

CSR No. 5908

PRETRIAL ORDER

EXHIBIT 19

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

EXHIBIT 19:

Plaintiffs' Statement of Additional Matters for Trial

Based on the current state of the case and the Court's rulings to date, Plaintiffs present the following list of issues that they would like to address at the Pretrial Conference. Plaintiffs reserve the right to supplement or amend this list based on issues raised by Defendants, orders by the Court, or negotiations between the parties.

1. Trial on Willful Infringement: The Court's January 18, 2019 Oral Order stated that the issue of willful infringement will be tried separately from the issues of infringement, invalidity, and damages to be presented at the April 29, 2019 trial. Plaintiffs seek the Court's guidance on when such a trial would take place in the event the jury returns a verdict that the asserted patents are infringed and not invalid.

2. Defendants' Prior Art Arguments for Trial: Defendants have asserted 45 prior art combinations and 2 anticipation theories based on at least 14 different prior art references.¹ In total, Defendants currently assert at least 145 different prior art theories for the 16 asserted claims. Some of these theories were not fairly disclosed by Dr. Slocum in his expert report or in Defendants' Final Invalidity Contentions.

¹ One reference is the "Admitted Prior Art" which itself includes multiple prior art references.

Given the time constraints of a 5-day trial, Defendants could not possibly present all of these theories at trial. Plaintiffs raised this issue with Defendants on February 27, 2019, but Defendants have refused to reduce the number of prior art arguments they have asserted or identify the subset of those arguments that they intend to present at trial.

Defendants should be ordered to reduce the number of invalidity theories they currently assert and provide Plaintiffs with that information well in advance of trial.

3. Plaintiffs' Request for Updated Financials. Plaintiffs have requested updated information on Defendants' sales since July 2018, so the most complete financial information may be presented to the jury for damages purposes. Defendants have considered the request, but have not committed to providing updated information that would allow the experts to revise their damages figures in time for trial.

4. Defendants' New Issues Presented in the Pretrial Order. Defendants have raised new issues and defenses for the first time in the pretrial order. For example, Defendants proposed an instruction on the "Reverse Doctrine of Equivalents," which has never been raised as a defense before. To the extent Defendants still intend to raise this issue at trial, or any other issue not previously disclosed, they should be precluded from doing.

PRETRIAL ORDER

EXHIBIT 20

IN THE UNITED STATES DISTRICT
COURT FOR THE DISTRICT OF
DELAWARE

F'REAL FOODS, LLC and)	
RICH PRODUCTS CORPORATION,)	
)	
Plaintiffs,)	
)	
v.	)	C.A. No. 16-41 (CFC)
	)	CONSOLIDATED
)	
HAMILTON BEACH BRANDS,)	
INC., HERSHEY CREAMERY)	
COMPANY and PAUL MILLS d/b/a)	
MILLS BROTHERS MARKETS,)	
)	
Defendants.)	

Exhibit 20

Defendants' Statement of Additional Matters

Defendants Hamilton Beach Brands, Inc. and Hershey Creamery Company (collectively, "Defendants") present the following list of additional matters to address at the Pretrial Conference scheduled on April 11, 2019. Defendants reserve the right to modify or supplement this list to the extent necessary to fairly reflect the Court's rulings on any pending motions, the Court's resolution of any evidentiary issues, various other subsequent orders of the Court, agreements of the parties, and/or other developments in the case.

1. Plaintiffs' Fourth Motions *in Limine*: The Court's Supplemental and Amended Scheduling Order of December 3, 2018 stated that each party was limited

to three *in limine* requests, unless otherwise permitted by the Court. In the same Order, this Court permitted Plaintiffs to submit its first motion *in limine* on December 14, 2018 on their alleged estoppel issues related to the '662 *inter partes* review. The Court reserved ruling on whether Plaintiffs will be permitted to file two (as opposed to three) additional *in limine* motions. Defendants' position is that Plaintiffs should be permitted to file only *two* additional motions *in limine* prior to the pre-trial conference on April 11, 2019. Allowing Plaintiffs more motions *in limine* than Defendants would unfairly provide Plaintiffs with a procedural advantage at trial that was not made available to Defendants. Indeed, as point #2 below indicates, Defendants had strong reasons to bring its own "fourth" motion *in limine* as Plaintiffs have done. Accordingly, Plaintiffs' third motion *in limine* should be denied.

2. Avoiding a Potential Ground for a Mistrial. During the parties' meet-and-confer regarding motions *in limine*, Defendants' sought Plaintiffs' agreement that Plaintiffs would not argue or infer that Defendants improperly accessed or utilized f'real's technology. Counsel for Plaintiffs refused to agree to this. Counsel for Defendants explained that such an argument is impermissible, and that the Court, in *EMC Corp. v. Pure Storage, Inc.*, No. CV 13-1985-RGA, 2016 WL 775742, at *3 (D. Del. Feb. 25, 2016), has previously said so. In *EMC Corp.*, the Court stated, "I appreciate Pure's concern that the jury not be led to consider

whether Pure improperly accessed Data Domain's technology. I therefore encourage the parties to propose specific measures that may help to reduce the probability that the jury could make improper inferences on the basis of evidence presented regarding pre-suit knowledge." *Id.* at *3. The Court further noted that "EMC is advised that any hint of argument about improper conduct in relation to Data Domain's technology would be grounds for a mistrial, with EMC to pay Pure's expenses for the first trial." *Id.* at *3 n.2 (citing *Carrier Corp. v. Goodman Global, Inc.*, No. 12-930-SLR, 2016 WL 698652, at *14 (D. Del. Feb. 22, 2016) (granting new trial). The concern is similarly warranted in the instant case, as evidenced by Dr. Maynes' Expert Report, which states that "Hamilton Beach freely admitted that having access to f'real's technology" gained value for Hamilton Beach. Maynes' Expert Report ¶ 119 (filed at D.I. 179-2 Ex. L).

3. Bifurcated Trial: On January 18, 2019, the Court stated in an Oral Order that issues of inequitable conduct and willful infringement will be tried separately from the issues of infringement, invalidity, and damages. Accordingly, all testimony, evidence, and argument presented on these bifurcated issues should be precluded at the April 29, 2019 trial by this Court because such issues are not relevant and could be prejudicial to the parties. Moreover, to the extent that is not clear from substance of the Pretrial Order, the parties have not set forth, in this Pretrial Order, their evidence relating to the issues of antitrust, inequitable conduct,

willful infringement, and injunctive relief, although some of the evidence set forth in this Pretrial Order may be relevant to those issues.

4. Authentication of Documents on Defendants' Exhibit List.

Plaintiffs are contesting the authenticity of a number of documents on Defendants' exhibit list produced by Plaintiffs' counsel in this case. But there appears to be no basis for such objections. *Tracinda Corp. v. DaimlerChrysler AG*, 362 F. Supp. 2d 487, 500 (D. Del. 2005). In addition, Plaintiffs are also objecting to the authenticity of Japanese Utility Model Application JP H04-136787 U ("Sato"), which is clearly self-authenticating as an Official Publication of the Japan Patent Office under Fed. R. Evid. 902(5). Resolving these authenticating issues may streamline trial by disposing of a number of evidentiary disputes.

5. Additional Limits on Number of Asserted Claims and Prior Art References. Because this is a timed trial scheduled for five (5) days, Defendants propose that the Court limit the number of patent claims that Plaintiff may assert at trial, coupled with a limitation on the number of prior art combinations that Defendants may assert at trial. Defendants believe that these final claim / combination limits may depend on the summary judgment rulings, thus Defendants propose that ruling on the final claim / combination limits be reserved for a time after the summary judgment motions have been decided. Defendants' proposal, at that time, will likely be in the range of 2 asserted claims per patent maximum, with

a maximum of 3 prior art combinations allowed per asserted patent claim. Defendants will need the Court's determinations on Plaintiffs' repeated challenges to using the Sato reference as prior art, including authenticity, in order to narrow its prior art arguments.